

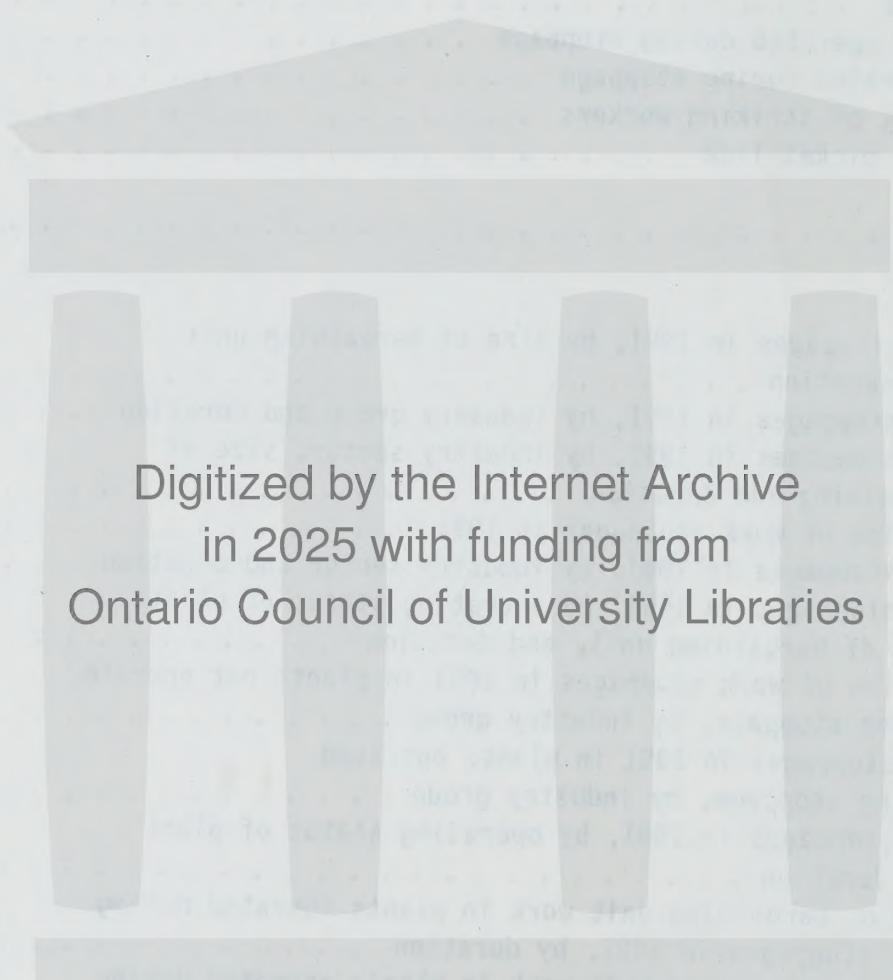
## **REPLACEMENT OF STRIKING WORKERS DURING WORK STOPPAGES IN 1991**

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# **REPLACEMENT OF STRIKING WORKERS DURING WORK STOPPAGES IN 1991**

This paper reports the results of a survey conducted to determine the extent to which striking workers were replaced during work stoppages in 1991, and to examine the nature of the replacements and their effects on the duration of the stoppages. The survey covered 94 stoppages that began and ended during 1991, and involved contract negotiations in industries other than construction, with the exception of stoppages that are not subject to the Ontario Labour Relations Act.\*

The survey was conducted by telephone, and efforts were made to interview both the union and management representatives who were involved in each stoppage to ensure that information was obtained from each side in the dispute. Of the 94 stoppages, both parties responded in 87, or 93 percent, and provided similar information about the use of replacements for strikers during the stoppage. Of the remaining stoppages, only the union responded in one, and only the employer responded in six. The dimensions of the stoppages, including their magnitude and duration, and the industries affected, are described before proceeding to a discussion of the incidence of striker replacements in these stoppages.

## **DIMENSIONS OF STOPPAGES**

The analysis in this section is based on data collected on work stoppages in 1991 as part of the Ministry's regular statistical series on strikes and lockouts in the province. The terms "work stoppage" and "strike" are used interchangeably in the discussions, and both terms are defined to include lockouts.

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\* Eleven stoppages that began in 1991 are not covered in the study. They include 2 in the construction industry, 2 involving teachers subject to the School Boards and Teachers Collective Negotiation Act, 3 that occurred during the term of the agreements, and 4 that were still in progress at December 31, 1991.



### Size of Stoppages

A total of 20,555 workers participated in the 94 stoppages, representing only 0.4 percent of the province's non-agricultural paid work force in 1991 (Table 1). Workers in bargaining units of fewer than 50 employees were involved in 54 percent of the stoppages, but they represented only 5 percent of the total participants. Stoppages of 50 to 199 workers accounted for 31 percent of all strikes and 14 percent of the total strikers. The largest stoppages, those involving 200 workers or more, accounted for 15 percent of all strikes and 80 percent of the total participants. Of these large stoppages, 3 involved more than 1,000 workers each.

### Industries Affected

The incidence of stoppages was higher in non-manufacturing industries. About 60 percent of the stoppages occurred in this sector, and involved 76 percent of all workers on strike (Table 2). The stoppages were concentrated in education (12, with 24 percent of all workers in non-manufacturing), local government (9, with 3 percent of the strikers), and retail trade (6, with 1.5 percent of the strikers). The largest concentration of workers occurred in transportation, with 55 percent involved in 4 stoppages.

In manufacturing industries, stoppages were concentrated in metal fabricating (12, with 11 percent of all workers in manufacturing), transportation equipment, including auto parts (6, with the largest proportion of workers, 39 percent), and machinery (5, with 9 percent of the workers). Three stoppages occurred in food and beverage and involved the second largest proportion of workers in this sector, with 20 percent.

Table 3 shows that 28 percent of the stoppages in manufacturing industries occurred among workers in bargaining units of fewer than 25 employees, 60 percent involved workers in units of 25 to 199 employees, and the remaining 12 percent involved large units of 200 or more workers. In contrast, 43 percent of the stoppages in non-manufacturing industries involved units of fewer than 25



workers, 39 percent involved units of 25 to 199 workers, and the remaining 18 percent involved units of 200 or more workers.

#### **Duration of Stoppages**

The 94 stoppages lasted 29.8 days on average (Table 4). A large proportion were of short duration. About 22 percent, involving 48 percent of all workers, were settled in less than a week; and about 30 percent, involving 36 percent of the workers, were in effect for 7 to 20 days. On the other hand, 43 percent of the stoppages, involving 36 percent of the workers, were in effect for 28 days or longer. Included in this group were 7 stoppages, involving 467 workers, that continued for 70 days or longer.

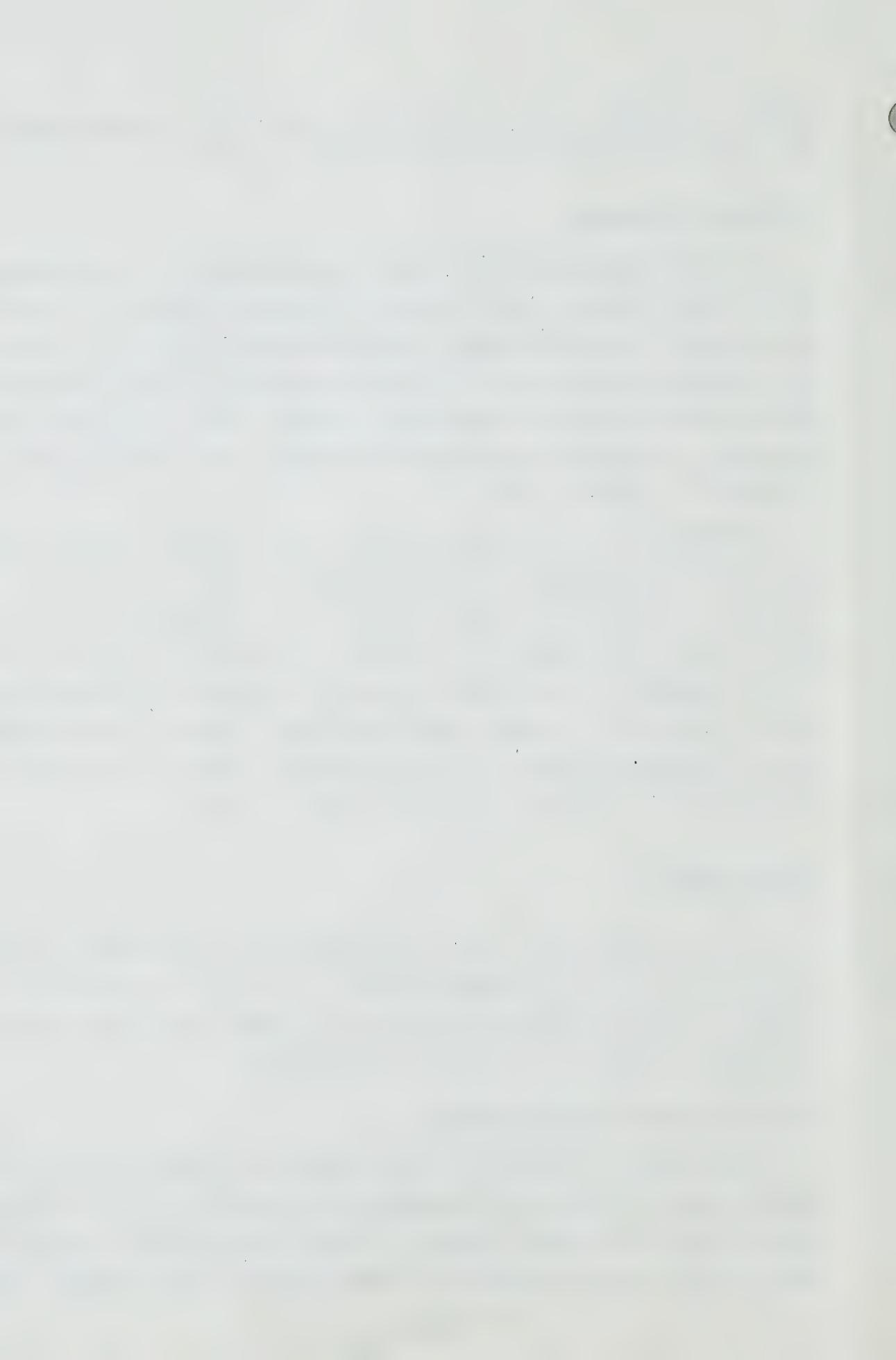
Stoppages in manufacturing industries lasted 28 days on average, compared to 32 days for stoppages in non-manufacturing industries (Table 5). Ten stoppages in manufacturing, with 2 percent of all strikers, and 11 in non-manufacturing with 46 percent of all strikers, were settled in less than a week. Twenty stoppages in both sectors, involving 7 percent and 8 percent of all strikers respectively, lasted longer than 28 days. Included in these stoppages were 2 in manufacturing and 5 in non-manufacturing, together involving just over 2 percent of all strikers, that lasted 70 days or longer.

#### **SURVEY RESULTS**

This section examines the incidence and nature of replacements used for striking workers in the 94 stoppages studied. As noted in the introduction, the analysis is based on information obtained in telephone interviews with union and management representatives involved in the stoppages.

#### **Plants Not Operated During Stoppage**

Respondents in 40 percent of all stoppages, involving 62 percent of all workers, reported that the work normally performed by the workers on strike was not done during the stoppage (Table 6). Most of the respondents reported that the plant was closed completely for the duration of the stoppage, causing



temporary layoffs of office and other non-union employees. A few made shipment and delivery of orders in the first few days of the stoppage, some with the agreement of the union; and others did maintenance and cleaning of machinery, or engaged plant security services. About 61 percent of these stoppages involved workers in bargaining units of 10 to 99 employees, accounting for only 8 percent of the workers in non-operated plants. However, 85 percent of the workers were involved in 5 stoppages in bargaining units of 200 or more employees.

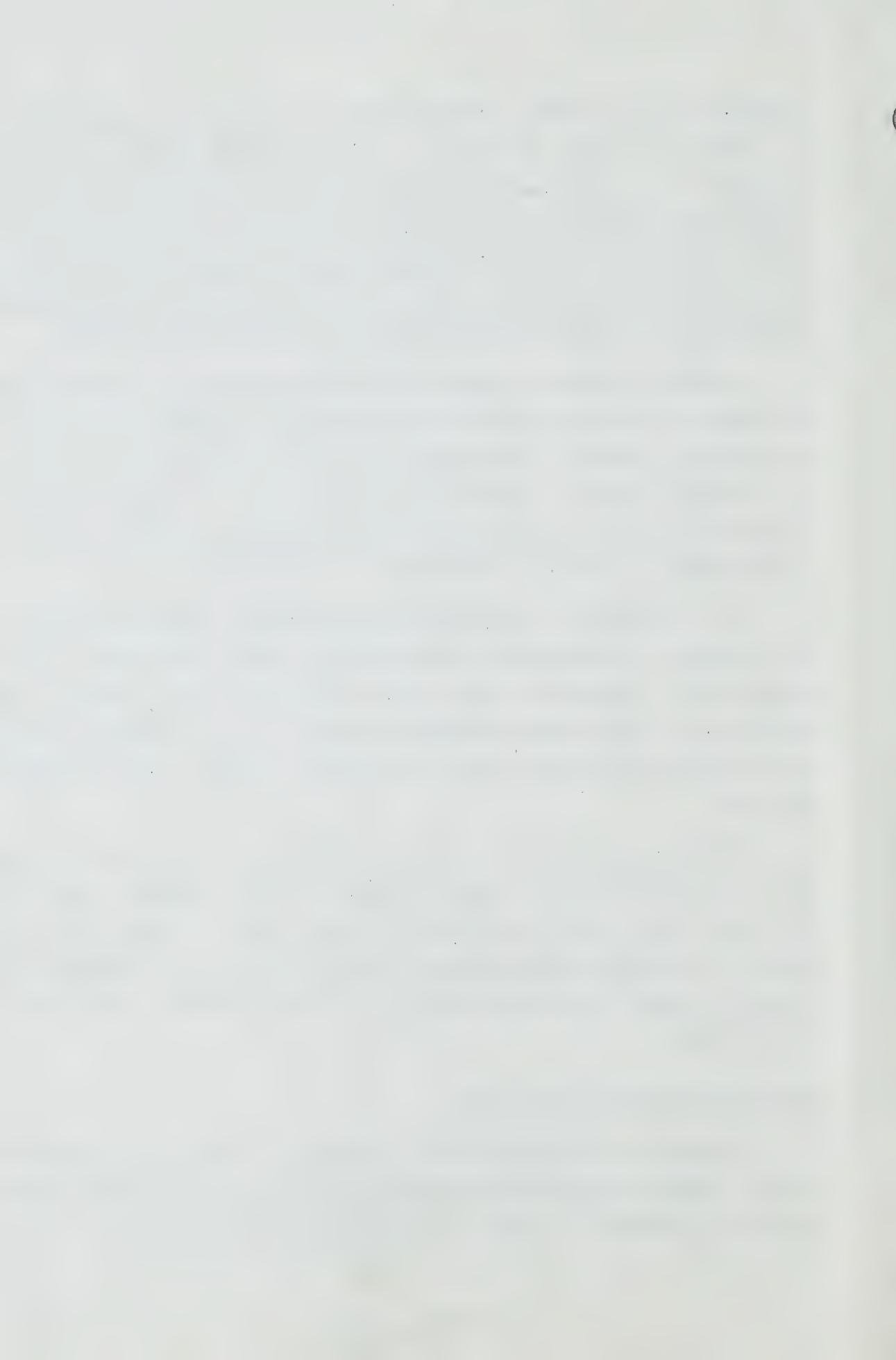
Of the 38 stoppages in plants that were not operated during the stoppage, 63 percent occurred in manufacturing industries, involving 28 percent of the total workers (Table 7). The stoppages were concentrated in metal fabricating (7, with 228 workers), and transportation equipment (4, with 1,577 workers). Among other manufacturing industries, food and beverage accounted for the second largest number of workers, 969 involved in 2 stoppages.

The 14 stoppages in non-manufacturing plants that were not operated during the stoppage were spread thinly among industry groups (Table 7). The largest number was 3 stoppages in both retail trade and food services, together accounting for only 3 percent of the total workers involved. However, 92 percent of the workers in this sector were involved in 2 stoppages in the transportation industry.

Stoppages in plants that were not operated during the stoppage lasted 25.1 days on average (Table 9). About 47 percent of these stoppages were settled in less than 14 days, involving 83 percent of the workers in non-operated plants. However, 36 percent of the stoppages, involving 11 percent of the workers, lasted 35 days or longer. Only one stoppage, involving 105 workers, continued longer than 70 days.

#### **Plants Operated During Stoppage**

Respondents in 60 percent of all stoppages, involving 32 percent of all workers, reported that the work normally performed by the striking workers was continued during the stoppage. Employers reported operating at low to full



capacity, with 90 to 100 percent capacity reported by public sector employers in education and local government.

Of the 56 stoppages in plants that were operated during the stoppage, 77 percent involved workers in bargaining units of fewer than 100 employees, accounting for 18 percent of the workers in operating plants (Table 6). However, 74 percent of the workers were involved in 9 stoppages in bargaining units of 200 or more workers.

Of the stoppages in operated plants, 34 percent occurred in manufacturing industries, involving 17 percent of the total workers (Table 8). The stoppages were concentrated in metal fabricating (5, with 283 workers), and machinery (4, with 423 workers). Among other manufacturing industries, transportation equipment accounted for the second largest number of workers, 308 involved in 2 stoppages.

The 37 stoppages in operated plants in non-manufacturing industries were concentrated in education, with 30 percent of the stoppages, accounting for 74 percent of the total workers involved (Table 8). Eight stoppages, involving 402 workers, occurred among employees in local government.

Stoppages in operated plants lasted 33 days on average (Table 9). About 36 percent of these stoppages were settled in less than 14 days, involving 48 percent of the workers in operated plants. Six stoppages, involving the second largest proportion of the workers, 27 percent, lasted 14 to 20 days; 43 percent of the stoppages, involving 19 percent of the workers, were in effect for 21 to 69 days; and 6 stoppages, involving 5 percent of the workers, continued for 70 days or longer.

#### **Replacement of Striking Workers**

Table 10 provides data indicating the categories of persons who did the work of the strikers in the 56 stoppages in which the plant was operated during the stoppage. Employers in 29 percent of the stoppages, involving 19 percent of the workers, reported that only management personnel did the work of the striking workers. Management staff and non-union employees were used in 20 percent of the



stoppages, involving 57 percent of the workers; and management staff with non-union and new employees were used in 21 percent of the stoppages, involving 6 percent of the workers. In 7 stoppages, involving 2 percent of the workers, management staff with non-union employees and employees who abandoned the strike, did the work. In the remaining 18 percent of the stoppages, involving 16 percent of the workers, part of the work was assigned to management staff and non-union employees, and part was contracted out.

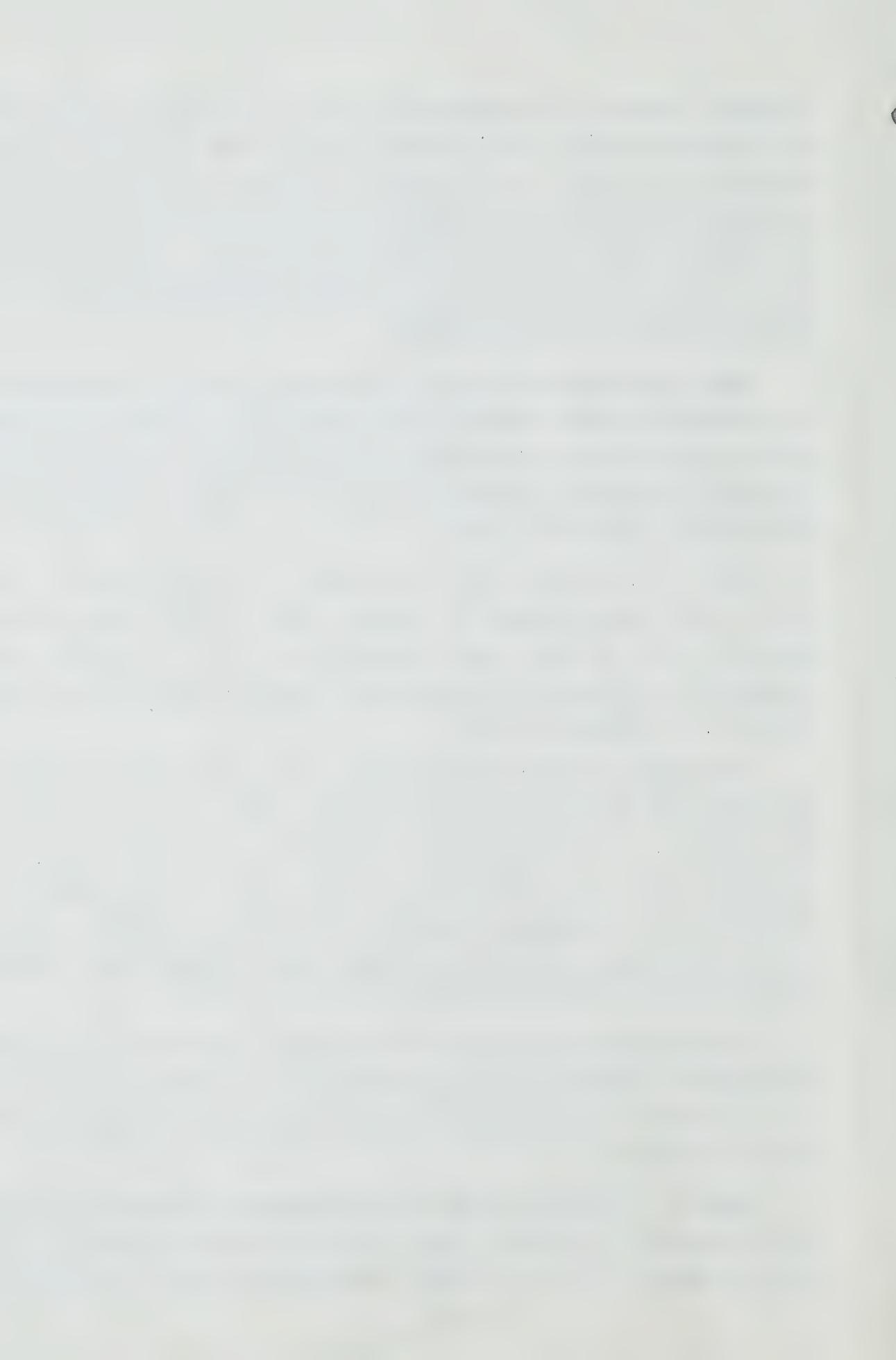
Among the management personnel used to do the work of strikers, were some in 2 stoppages who were brought in from other plants, and some in one stoppage who were transferred to another plant along with part of the work in dispute. Similarly, the non-union replacements included employees in 3 stoppages who were also brought in from other plants.

**Size.** Table 11 shows that four categories of replacements for striking workers were more prevalent in stoppages that occurred among workers in bargaining units of fewer than 100 employees. The 38 stoppages involved accounted for 68 percent of all stoppages in operated plants, but for only 15 percent of the workers involved.

By category, 70 percent of the stoppages with replacements from management, non-union staff and contracting out occurred in bargaining units of fewer than 100 workers; and 81 percent of the stoppages with replacements from the management staff only involved units of this size. Of the stoppages with replacements from management, non-union staff and new employees, 92 percent involved such units; and all of the stoppages with replacements from management, non-union staff, and returning strikers were of this size.

On the other hand, 55 percent of the stoppages where replacements come from management and non-union staff occurred among workers in bargaining units of 200 or more employees. These stoppages involved 54 percent of the workers in plant-operated stoppages.

**Industry.** Replacements from only the management staff were more often used for striking workers in manufacturing industries. As Table 12 shows, 75 percent of the stoppages with this category of replacements were in manufacturing,



involving 12 percent of all workers in plant-operated stoppages. The remaining stoppages in this category, 25 percent, were in non-manufacturing industries, involving 7 percent of the workers.

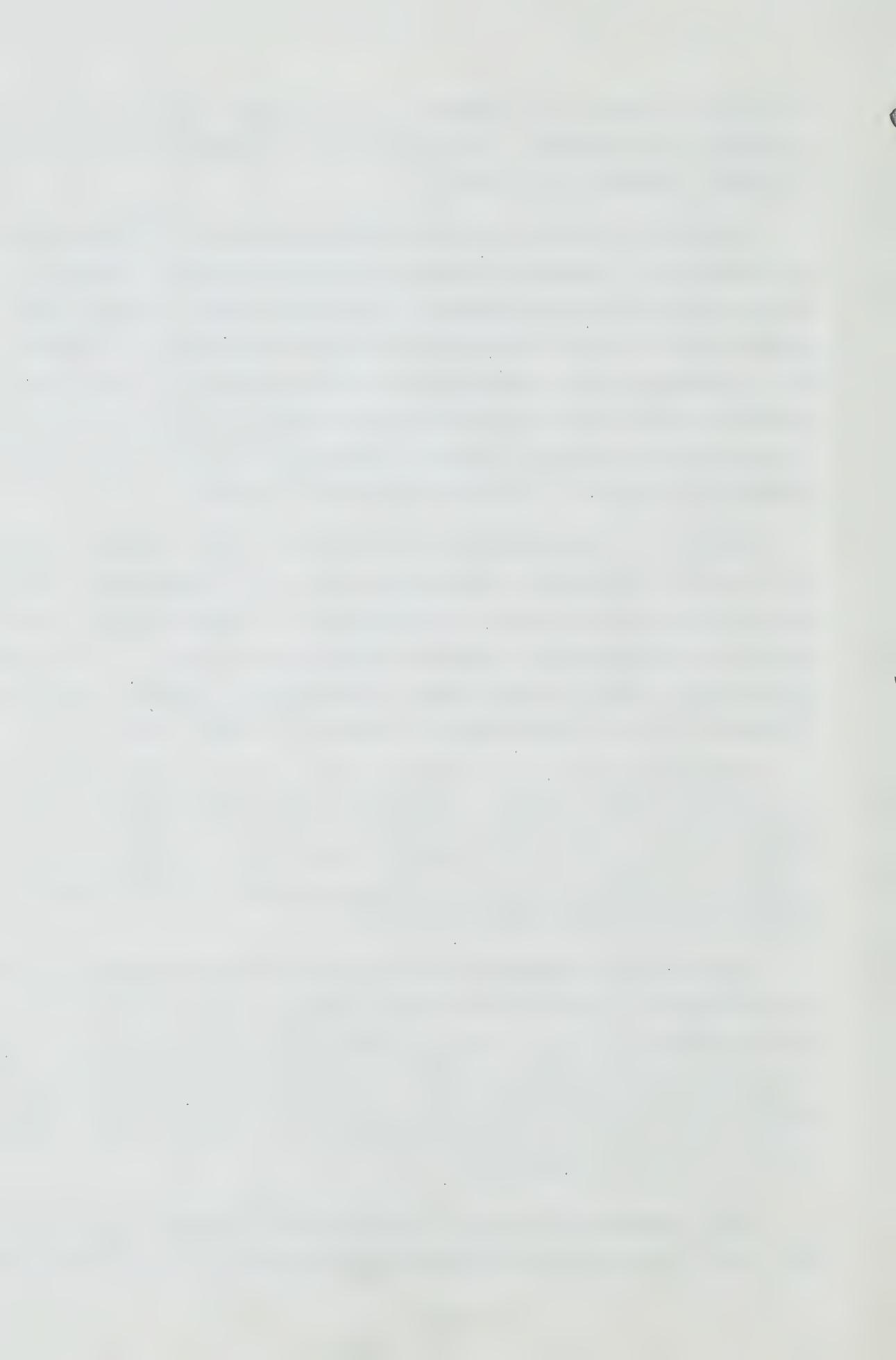
Stoppages involving each of the other four categories of replacements were more prevalent in stoppages in non-manufacturing industries. The 33 stoppages affected accounted for 59 percent of all plant-operated stoppages and for 76 percent of the workers involved. Nine of the ten stoppages in non-manufacturing with replacements from management, non-union employees and contracting-out, involved workers in utilities, education and local government. The 7 stoppages in manufacturing in these categories accounted for 15 percent of the total plant-operated stoppages and 5 percent of the workers involved.

**Duration.** Plant-operated stoppages lasted 33 days on average (Table 13). The 16 in which replacements for strikers came only from management staff, had the shortest average duration, with 23.6 days. Of these stoppages, 44 percent, involving 43 percent of the workers, lasted less than a week. Fifty percent, involving 50 percent of the workers, had durations between 7 and 62 days, averaging 35 days; and one stoppage involving 98 workers lasted 75 days.

Stoppages that used management staff and non-union employees as replacements lasted 33.5 days on average. Fifty-five percent, involving 83 percent of the workers, lasted between 7 and 27 days, averaging 14 days. The remaining stoppages, 45 percent, involving 17 percent of the workers, lasted between 28 and 69 days, averaging 55 days.

Stoppages where management with non-union staff and new employees were used as replacements, experienced the longest average duration, with 53.3 days. Of these stoppages, 50 percent, involving 28 percent of the workers, were settled in under 35 days, averaging 19.5 days. Five stoppages, 42 percent, involving 54 percent of the workers, ran for longer than 70 days, with the longest taking 143 days to raise the average duration to 94.8 days.

The 7 stoppages where work was continued with management, non-union staff and strikers who returned, lasted 28.1 days on average. Four of the stoppages,



involving 37 percent of the workers, were each settled within 8 days. Of the remaining stoppages, 2 involving 58 percent of the workers, lasted 50 days; and one involving 8 workers continued for 65 days.

Stoppages where part of the work was done by management and non-union staff and part was contracted out had the second shortest average duration, with 26.7 days. Nine of the 10 stoppages affected occurred in the public sector, and involved 34 percent of the employees. Of the 10 stoppages, 60 percent, involving all but 24 of the total employees, were settled in less than 21 days, averaging 10.2 days. Three stoppages, involving 18 workers, each lasted 47 days; and one involving 6 workers continued for 65 days.

#### Conduct on Picket Line

Respondents reported that no incidents of violence occurred on the picket line in 64 percent of the 94 stoppages, involving 26 percent of all workers who struck. Instances of minor violence were reported in 31 percent of the stoppages, involving 69 percent of the workers; and cases of severe violence were reported in 5 stoppages, involving 1,151 workers. Charges were laid by the police in 6 stoppages; a court injunction was issued in one stoppage; and an attempt to obtain an injunction in another stoppage ended with the signing of a collective agreement.

As Table 14 shows, 52 percent of the stoppages in which no incidents of violence were reported occurred in plants that were operated during the stoppage, and accounted for 32 percent of the workers involved. The remaining stoppages, 48 percent, occurred in non-operated plants, and involved 68 percent of the workers. Of the stoppages reporting minor violence, 69 percent occurred in operated plants, involving 35 percent of the workers; and the remainder, 31 percent, occurred in non-operated plants, involving 65 percent of the workers. The 5 stoppages reporting more serious violence occurred in plants that were operated.

The 60 stoppages that reported no violence lasted an average of 27.2 days, compared to 35.1 days for the 29 that reported minor violence, and 31 days for



the 5 that reported more serious violences. Stoppages in non-operated plants that reported no violence lasted an average 21.3 days, compared to 32.6 days for similar stoppages in operated plants. However, stoppages in operated plants reporting minor violence lasted an average of 34.2 days, compared to 37.1 days for similar stoppages in non-operated plants. As noted earlier, the 5 stoppages that reported more serious violence occurred in operated plants, and lasted an average of 31 days.

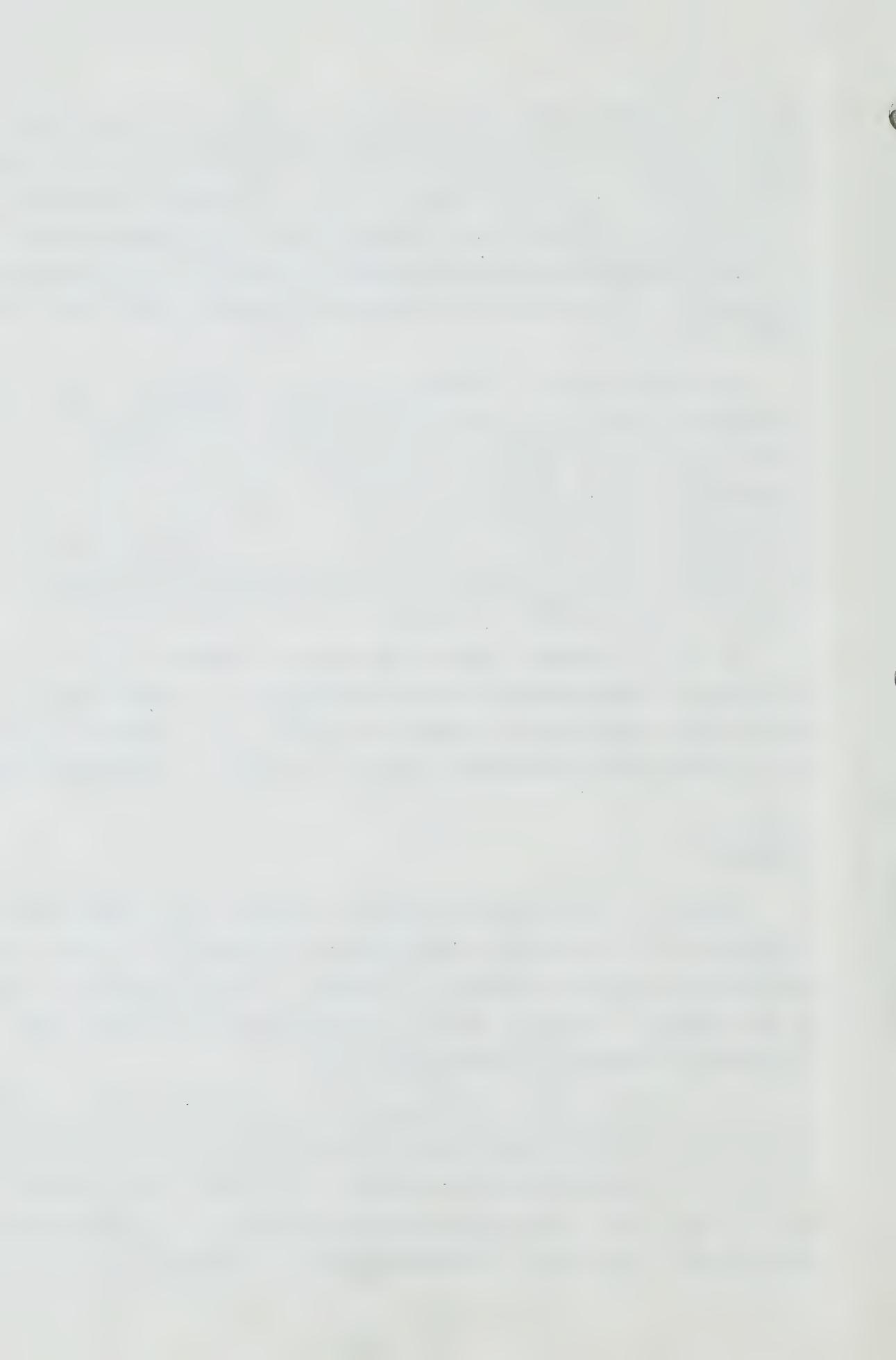
In operated plants, violence occurred in stoppages in each of the categories of employees who were used to replace striking workers. Table 15 shows that of the 20 stoppages in which minor violence occurred, 4 involved replacements from the management staff only. In addition to this source, non-union employees were used in 6 stoppages, non-union employees and new employees in 4 stoppages, and non-union employees and contracting-out in 5 stoppages. One stoppage involved employees who returned to work during the strike.

Of the 5 stoppages where more serious violence occurred, 2 used replacements from management and non-union employees, and contracting-out. One involved replacements from the management staff only; and 2 included replacements from non-union employees and new employees, in addition to management staff.

## SUMMARY

About 74 percent of the 94 stoppages studied occurred among workers in bargaining units of fewer than 100 employees, accounting for 12 percent of the 20,555 workers who participated in all stoppages. On the other hand, 15 percent of the stoppages occurred in large bargaining units of 200 or more employees, involving 81 percent of the total participants.

The stoppages were more prevalent in non-manufacturing industries, occurring in 60 percent of the total, and involving 76 percent of the workers. In this sector, stoppages were concentrated in education, local government, and retail trade. These three accounted for 48 percent of the non-manufacturing stoppages and 35 percent of the workers involved. Stoppages in food services,



transportation and utilities accounted for 23 percent, but involved 56 percent of the workers.

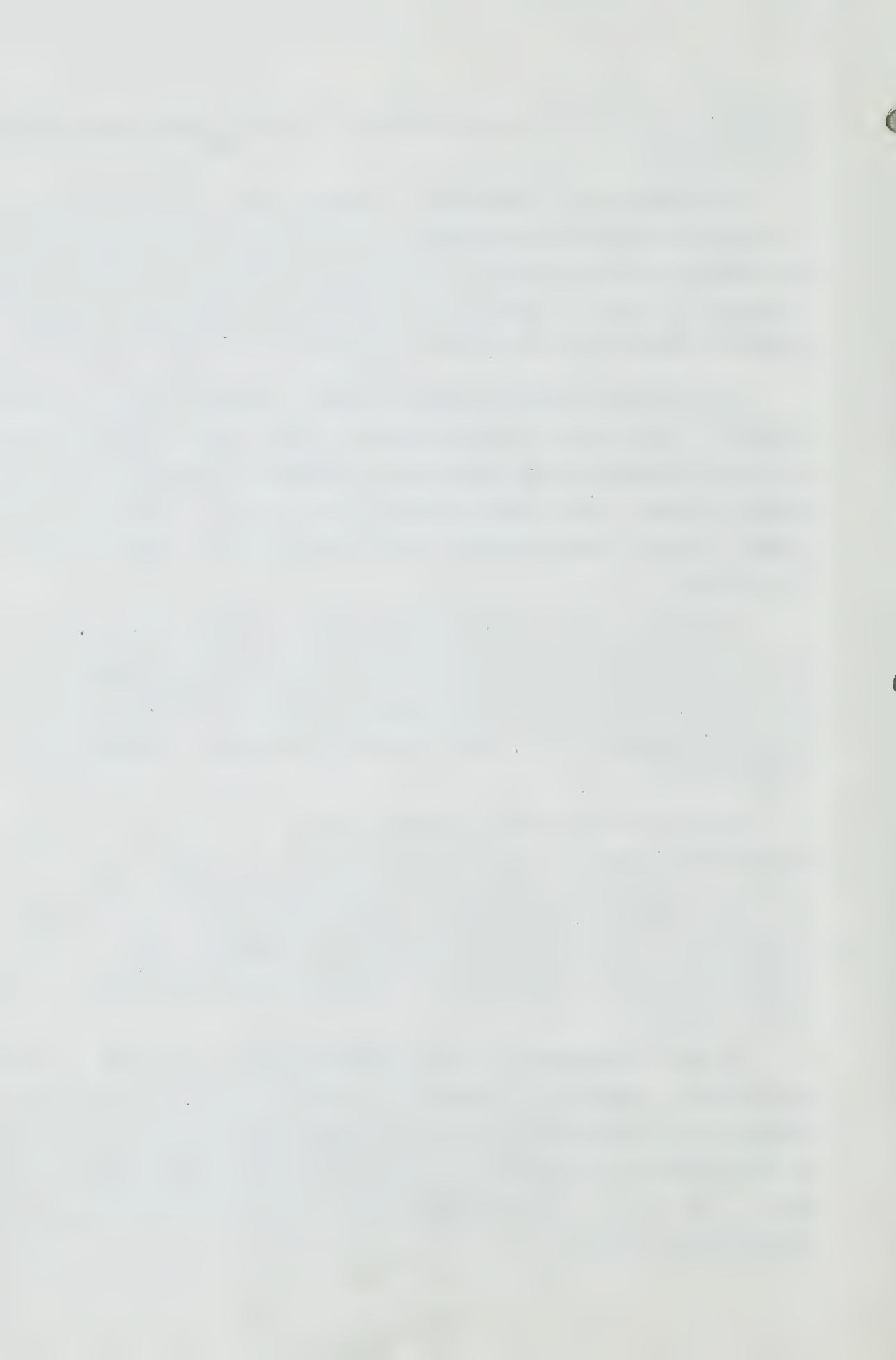
In manufacturing industries, stoppages were concentrated in metal fabricating, transportation equipment, and machinery. These three accounted for 53 percent of the manufacturing stoppages and 59 percent of the workers. Stoppages in food and beverage, wood products, non-metallic minerals, and chemicals accounted for 28 percent and involved 29 percent of the workers.

The stoppages lasted 29.8 days on average. About 22 percent, involving 48 percent of the workers, were settled in less than a week; and about 30 percent, involving 36 percent of the workers, were settled in 7 to 20 days. On the other hand, 43 percent, involving 36 percent of the workers, lasted for 28 days or longer. Seven of these stoppages, involving 467 workers, continued for longer than 70 days.

Respondents to the survey portion of the study reported that no incidents of violence occurred on the picket line in 64 percent of the stoppages, involving 26 percent of the workers. Minor violence occurred in 31 percent, involving 69 percent of the workers; and severe cases were reported in 5 stoppages, involving 1,151 workers.

The work normally performed by the workers on strike was not done in 40 percent of the stoppages, involving 62 percent of all workers. About 61 percent of these stoppages involved workers in bargaining units of 10 to 99 employees, accounting for 8 percent of the workers in non-operated plants. However, 85 percent of the workers were involved in 5 stoppages in bargaining units of 200 or more employees.

Of the 38 stoppages in non-operated plants, 63 percent occurred in manufacturing industries, involving 28 percent of the total workers, and concentrated in metal fabricating and transportation equipment. The 14 stoppages in non-manufacturing industries were spread thinly among industry groups. However, 92 percent of the workers were involved in 2 stoppages in the transportation industry.



Stoppages in non-operated plants lasted 25.1 days on average. About 47 percent were settled in less than 14 days, involving 83 percent of the workers. However, 36 percent, involving 11 percent of the workers, lasted 35 days or longer.

The work normally performed by the workers on strike was carried on in 60 percent of the stoppages, involving 38 percent of all workers. About 77 percent of these stoppages involved workers in bargaining units of fewer than 100 employees, accounting for 18 percent of the workers in operated plants. However, 74 percent of the workers were involved in 9 stoppages in bargaining units of 200 or more workers.

Of the 56 stoppages in operated plants, 34 percent occurred in manufacturing industries, involving 17 percent of the total workers, and concentrated in metal fabricating and machinery. The 37 stoppages in non-manufacturing were concentrated in the public sector in utilities, education and local government, with education accounting for 74 percent of the workers involved in plant-operated stoppages.

Stoppages in operated plants lasted 33 days on average, compared to the 25.1 days for stoppages in non-operated plants. Thirty-six percent were settled in less than 2 weeks, compared to 45 percent for stoppages in non-operated plants. Six stoppages continued for longer than 10 weeks, compared to one stoppage in non-operated plants.

The 56 operated plants maintained production or services during the stoppage at low to full capacity, with 90 to 100 percent capacity reported by public sector employers in education and local government. In all the stoppages, management employees were assigned to do the work normally performed by the striking workers, with some brought in from branch plants in 2 stoppages. In addition, non-union employees were reassigned to the struck work in 40 stoppages, with some brought in from branch plants in 5 stoppages; new employees were hired in 12 stoppages; strikers returned to work in 7 stoppages; and part of the work was contracted out in 10 stoppages that affected mostly public services.

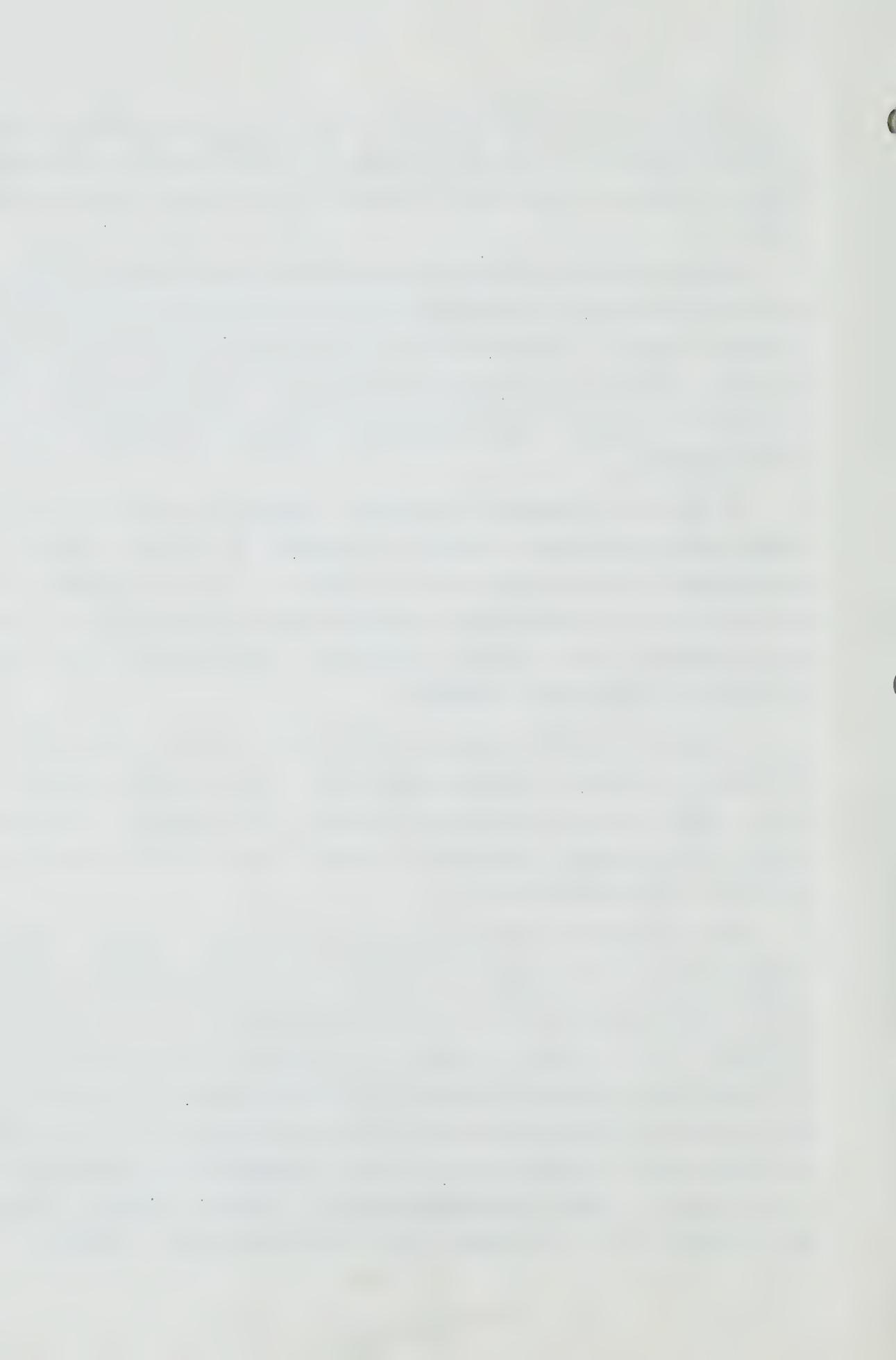


Table 1

Work Stoppages in 1991, by Size of Bargaining Unit and Duration

Size of Bargaining Unit	Number of Stoppages	Workers Involved	Duration of Stoppage		
			Average Days	Minimum Days	Maximum Days
Under 10 employees . . . . .	15	105	32.7	3	81
10-24 employees . . . . .	19	331	23.0	2	81
25-49 employees . . . . .	17	585	32.5	1	85
50-99 employees . . . . .	19	1,422	25.1	1	75
100-149 employees . . . . .	4	514	44.5	6	79
150-199 employees . . . . .	6	1,000	44.3	4	143
200-499 employees . . . . .	7	1,706	45.4	15	69
500 or more employees . . . . .	7	14,892	12.0	5	18
Total . . . . .	94	20,555	29.8	1	143

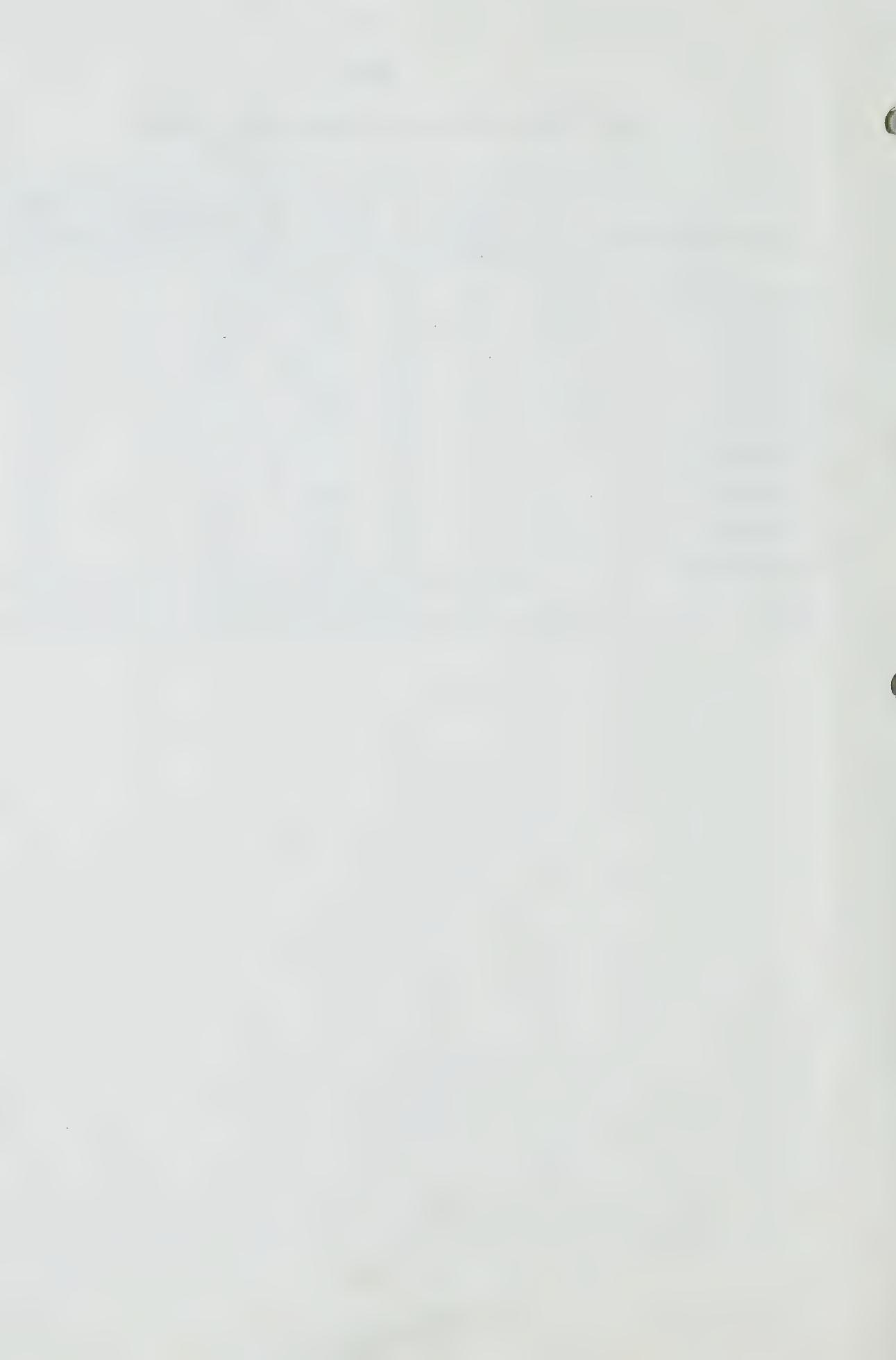


Table 2

Work Stoppages in 1991, by Industry Group and Duration

Industry Group	Number of Stoppages	Workers Involved	Duration of Stoppage		
			Average Days	Minimum Days	Maximum Days
<b>Manufacturing</b>					
Food and beverage . . . . .	3	973	28.3	5	64
Rubber products . . . . .	1	29	39.0	-	39
Leather . . . . .	2	97	40.5	31	50
Wood products . . . . .	3	238	31.0	4	79
Paper products . . . . .	2	71	5.0	1	9
Primary metals . . . . .	1	98	75.0	-	75
Fabricated metals . . . . .	12	511	13.1	1	37
Machinery . . . . .	5	453	56.2	49	66
Transportation equipment . . . . .	6	1,885	15.7	6	42
Electrical products . . . . .	2	284	46.5	46	47
Non-metallic minerals . . . . .	3	134	20.7	7	46
Chemicals . . . . .	3	80	41.0	7	62
<b>Total . . . . .</b>	<b>43</b>	<b>4,853</b>	<b>27.7</b>	<b>1</b>	<b>79</b>
<b>Non-manufacturing</b>					
Logging . . . . .	2	480	89.0	35	143
Mining . . . . .	1	45	45.0	-	45
Transportation . . . . .	4	8,580	28.0	6	49
Utilities . . . . .	4	49	28.0	8	65
Wholesale trade . . . . .	3	861	40.0	18	51
Retail trade . . . . .	6	232	27.0	1	85
Finance . . . . .	1	9	21.0	-	21
Education services . . . . .	12	4,836	31.0	3	69
Health services . . . . .	2	46	81.0	-	81
Food services . . . . .	5	93	21.6	1	65
Other services . . . . .	2	34	8.0	-	8
Local government . . . . .	9	437	22.2	3	47
<b>Total . . . . .</b>	<b>51</b>	<b>15,702</b>	<b>31.5</b>	<b>1</b>	<b>143</b>
<b>All stoppages . . . . .</b>	<b>94</b>	<b>20,555</b>	<b>29.8</b>	<b>1</b>	<b>143</b>

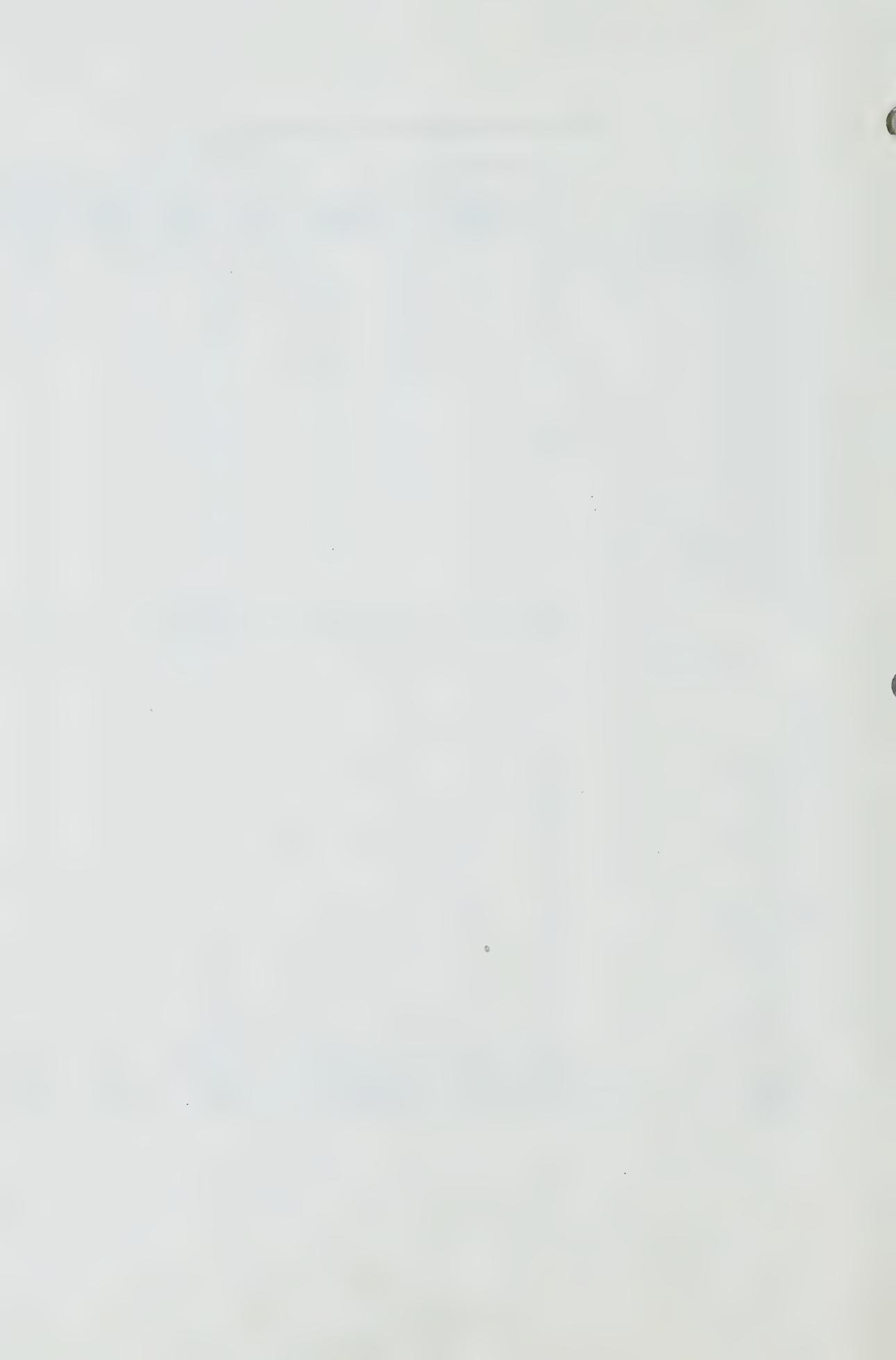


Table 3

Work Stoppages in 1991, by Industry Sector, Size of Bargaining and Duration

Industry Sector and Size of Bargaining Unit	Number of Stoppages	Workers Involved	Duration of Stoppage		
			Average Days	Minimum Days	Maximum Days
<b>Manufacturing</b>					
Under 10 employees . . . . .	1	4	5.0	-	5
10-24 employees . . . . .	11	188	25.7	2	57
25-49 employees . . . . .	8	289	25.0	1	66
50-99 employees . . . . .	12	913	25.4	1	75
100-149 employees . . . . .	4	514	44.5	6	79
150-199 employees . . . . .	2	335	33.0	7	59
200-499 employees . . . . .	3	688	42.7	15	64
500 or more employees . . . . .	2	1,922	14.0	12	16
<b>Total . . . . .</b>	<b>43</b>	<b>4,853</b>	<b>27.7</b>	<b>1</b>	<b>79</b>
<b>Non-manufacturing</b>					
Under 10 employees . . . . .	14	101	34.6	3	81
10-24 employees . . . . .	8	143	19.3	2	81
25-49 employees . . . . .	9	296	39.1	1	85
50-99 employees . . . . .	7	509	24.4	1	49
100-149 employees . . . . .	-	-	-	-	-
150-199 employees . . . . .	4	665	50.0	4	143
200-499 employees . . . . .	4	1,018	47.5	17	69
500 or more employees . . . . .	5	12,970	11.2	5	18
<b>Total . . . . .</b>	<b>50</b>	<b>15,702</b>	<b>31.5</b>	<b>1</b>	<b>143</b>
<b>All stoppages . . . . .</b>	<b>94</b>	<b>20,555</b>	<b>29.8</b>	<b>1</b>	<b>143</b>



Table 4

Duration of Work Stoppages in 1991

Duration	Number of Stoppages	Workers Involved	Duration of Stoppage		
			Average Days	Minimum Days	Maximum Days
Under 7 days . . . . .	21	9,854	3.7	1	6
7 - 13 days . . . . .	17	4,428	9.2	7	13
14 - 20 days . . . . .	11	2,890	15.7	14	18
21 - 27 days . . . . .	5	108	25.2	21	27
28 - 34 days . . . . .	3	172	30.3	29	31
35 - 41 days . . . . .	3	410	37.0	35	39
42 - 48 days . . . . .	10	606	45.9	42	48
49 - 55 days . . . . .	8	604	50.4	49	54
56 - 62 days . . . . .	3	246	59.3	57	62
63 - 69 days . . . . .	6	770	66.3	64	69
70 or more days . . . . .	7	467	89.7	75	143
Total . . . . .	94	20,555	29.8	1	143

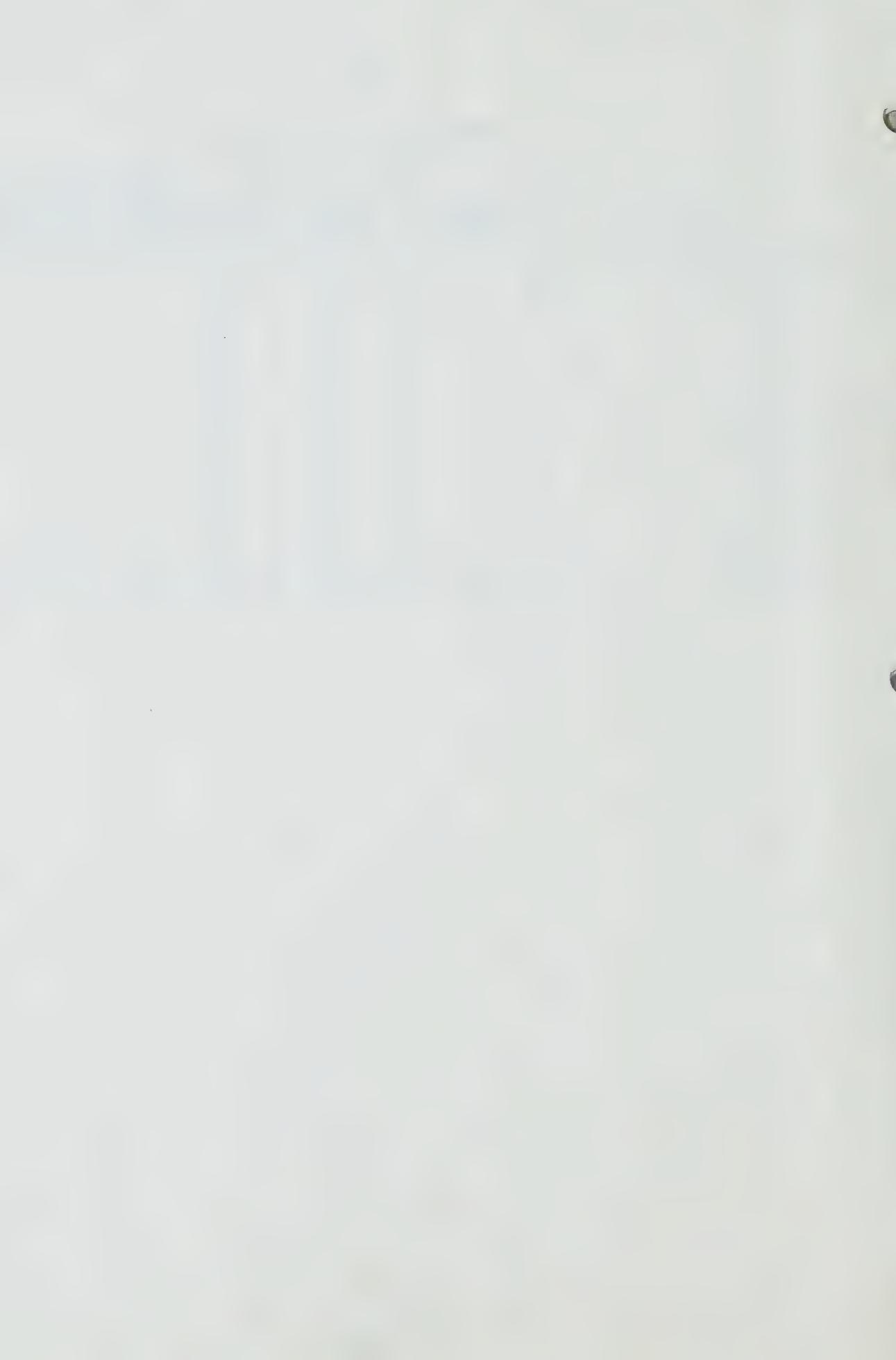


Table 5

Work Stoppages in 1991, by Industry Sector and Duration

Industry Sector and Duration	Number of Stoppages	Workers Involved	Duration of Stoppage		
			Average Days	Minimum Days	Maximum Days
<b>Manufacturing</b>					
Under 7 days . . . . .	10	441	3.9	1	6
7 - 13 days . . . . .	9	1,715	8.9	7	12
14 - 20 days . . . . .	4	985	15.3	15	16
21 - 27 days . . . . .	-	-	-	-	-
28 - 34 days . . . . .	3	172	30.3	29	31
35 - 41 days . . . . .	2	90	38.0	37	39
42 - 48 days . . . . .	4	35	45.3	42	47
49 - 55 days . . . . .	4	317	50.8		54
56 - 62 days . . . . .	3	246	59.3	57	62
63 - 69 days . . . . .	2	289	65.0	64	66
70 or more days . . . . .	2	203	77.0	75	79
<b>Total . . . . .</b>	<b>43</b>	<b>4,853</b>	<b>27.7</b>	<b>1</b>	<b>79</b>
<b>Non-Manufacturing</b>					
Under 7 days . . . . .	11	9,413	3.5	1	6
7 - 13 days . . . . .	8	2,713	9.6	8	13
14 - 20 days . . . . .	7	1,905	16.0	14	18
21 - 27 days . . . . .	5	108	25.2	21	27
28 - 34 days . . . . .	-	-	-	-	-
35 - 41 days . . . . .	1	320	35.0	-	35
42 - 48 days . . . . .	6	211	46.3	44	48
49 - 55 days . . . . .	4	287	50.0	49	51
56 - 62 days . . . . .	-	-	-	-	-
63 - 69 days . . . . .	4	481	67.0	65	69
70 or more days . . . . .	5	264	94.8	81	143
<b>Total . . . . .</b>	<b>51</b>	<b>15,702</b>	<b>31.5</b>	<b>1</b>	<b>143</b>
<b>All stoppages . . . . .</b>	<b>94</b>	<b>20,555</b>	<b>29.8</b>	<b>1</b>	<b>143</b>

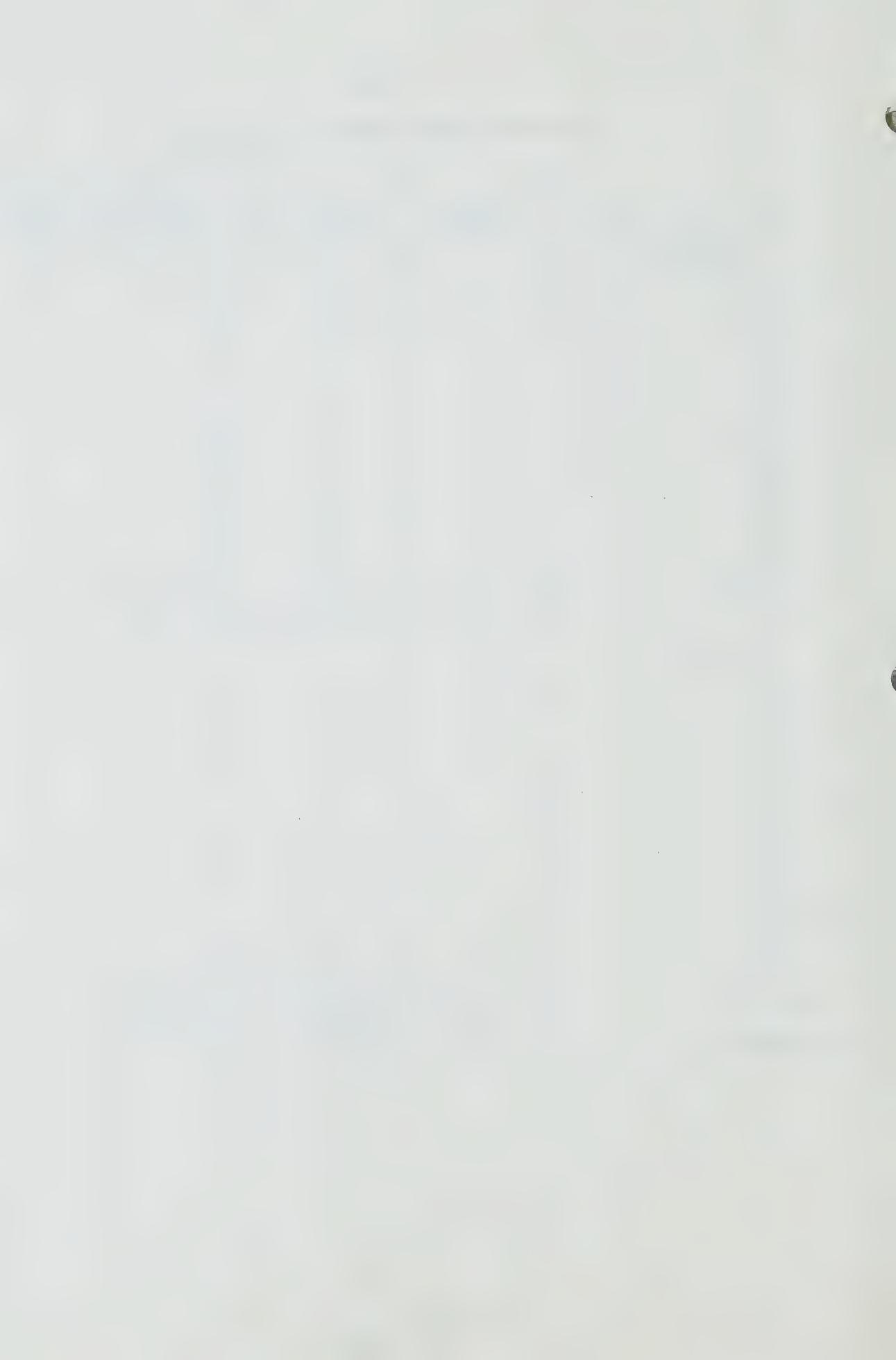


Table 6

**Work Stoppages in 1991, by Operating Status of Plant,  
Size of Bargaining Unit, and Duration**

Operating Status and Size of Bargaining Unit	Number of Stoppages	Workers Involved	Duration of Stoppage		
			Average Days	Minimum Days	Maximum Days
<b>Plant not operated during stoppage</b>					
Under 10 employees . . . . .	4	33	22.0	3	51
10-24 employees . . . . .	7	124	19.7	2	54
25-49 employees . . . . .	8	305	34.3	1	66
50-99 employees . . . . .	8	599	10.6	1	44
100-149 employees . . . . .	4	514	44.5	6	79
150-199 employees . . . . .	2	325	28.0	7	49
200-499 employees . . . . .	2	579	49.5	35	64
500 or more employees . . . . .	3	10,242	11.3	6	16
<b>Total . . . . .</b>	<b>38</b>	<b>12,721</b>	<b>25.1</b>	<b>1</b>	<b>79</b>
<b>Plant operated during stoppage</b>					
Under 10 employees . . . . .	11	72	36.5	5	81
10-24 employees . . . . .	12	207	24.9	2	81
25-49 employees . . . . .	9	280	30.9	1	85
50-99 employees . . . . .	11	823	35.5	4	75
100-149 employees . . . . .	-	-	-	-	-
150-199 employees . . . . .	4	675	52.5	4	143
200-499 employees . . . . .	5	1,127	43.8	15	69
500 or more employees . . . . .	4	4,650	12.5	5	18
<b>Total . . . . .</b>	<b>56</b>	<b>7,834</b>	<b>33.0</b>	<b>1</b>	<b>143</b>
<b>All stoppages . . . . .</b>	<b>94</b>	<b>20,555</b>	<b>29.8</b>	<b>1</b>	<b>143</b>

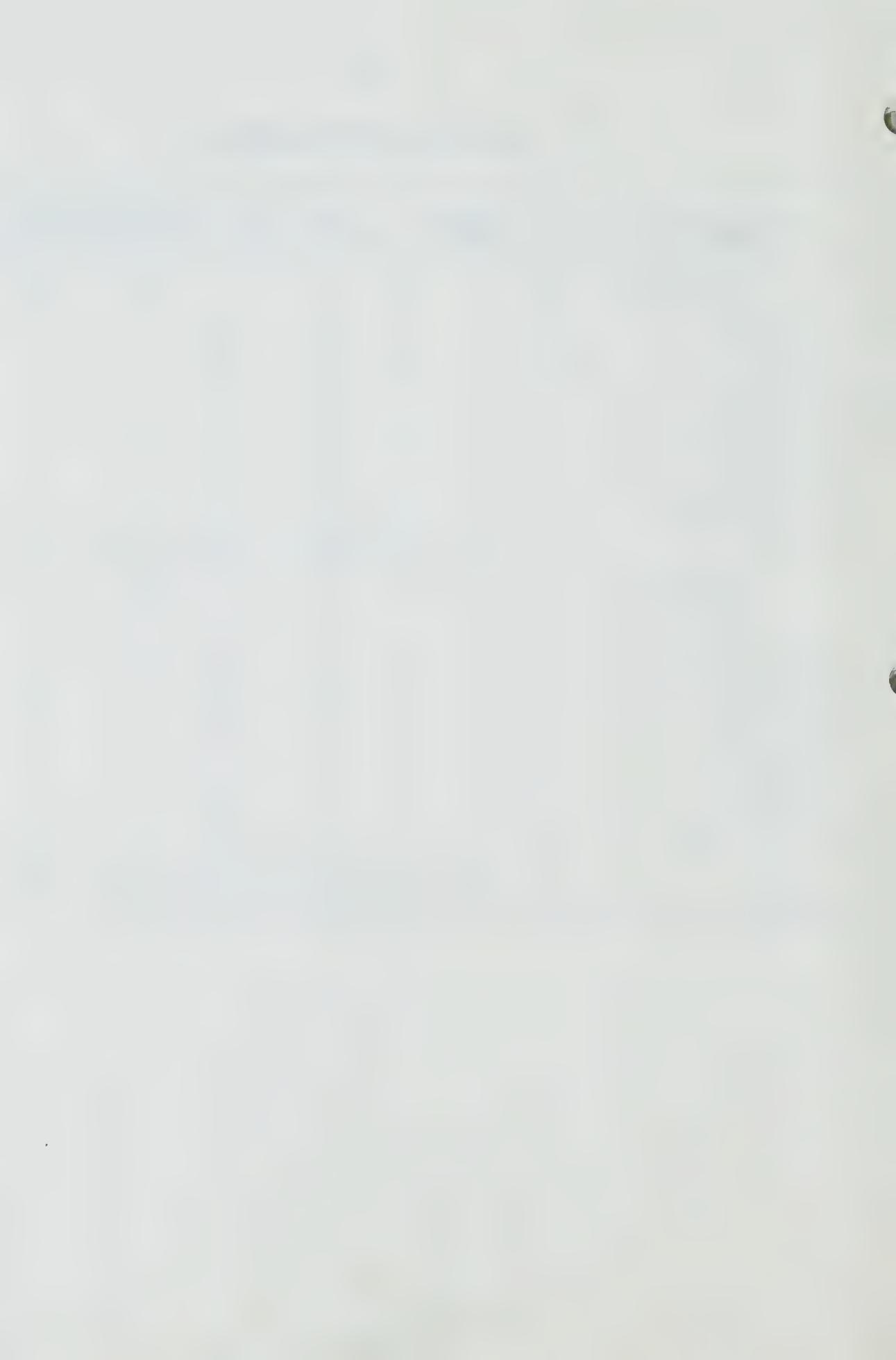


Table 7

Duration of Work Stoppages in 1991 in Plants Not Operated  
During Stoppage, by Industry Group

Industry Group	Number of Stoppages	Workers Involved	Duration of Stoppage		
			Average Days	Minimum Days	Maximum Days
<b>Manufacturing</b>					
Food and beverage . . . . .	2	969	40.0	16	64
Wood products . . . . .	2	185	44.5	10	79
Paper products . . . . .	2	71	5.0	1	9
Fabricated metals . . . . .	7	228	8.0	2	15
Machinery . . . . .	1	30	66.0	-	66
Transportation equipment . . . . .	4	1,577	9.3	6	12
Electrical products . . . . .	2	284	46.5	46	47
Non-metallic minerals . . . . .	2	101	27.5	9	46
Chemicals . . . . .	2	63	58.0	54	62
<b>Total . . . . .</b>	<b>24</b>	<b>3,508</b>	<b>25.1</b>	<b>1</b>	<b>79</b>
<b>Non-manufacturing</b>					
Logging . . . . .	1	320	35.0	-	35
Mining . . . . .	1	45	45.0	-	45
Transportation . . . . .	2	8,495	27.5	6	49
Wholesale trade . . . . .	2	46	51.0	-	51
Retail trade . . . . .	3	171	16.0	1	44
Education . . . . .	1	8	3.0	-	3
Food services . . . . .	3	93	11.7	1	17
Local government . . . . .	1	35	27.0	-	27
<b>Total . . . . .</b>	<b>14</b>	<b>9,213</b>	<b>25.0</b>	<b>1</b>	<b>51</b>
<b>All stoppages . . . . .</b>	<b>38</b>	<b>12,721</b>	<b>25.1</b>	<b>1</b>	<b>79</b>

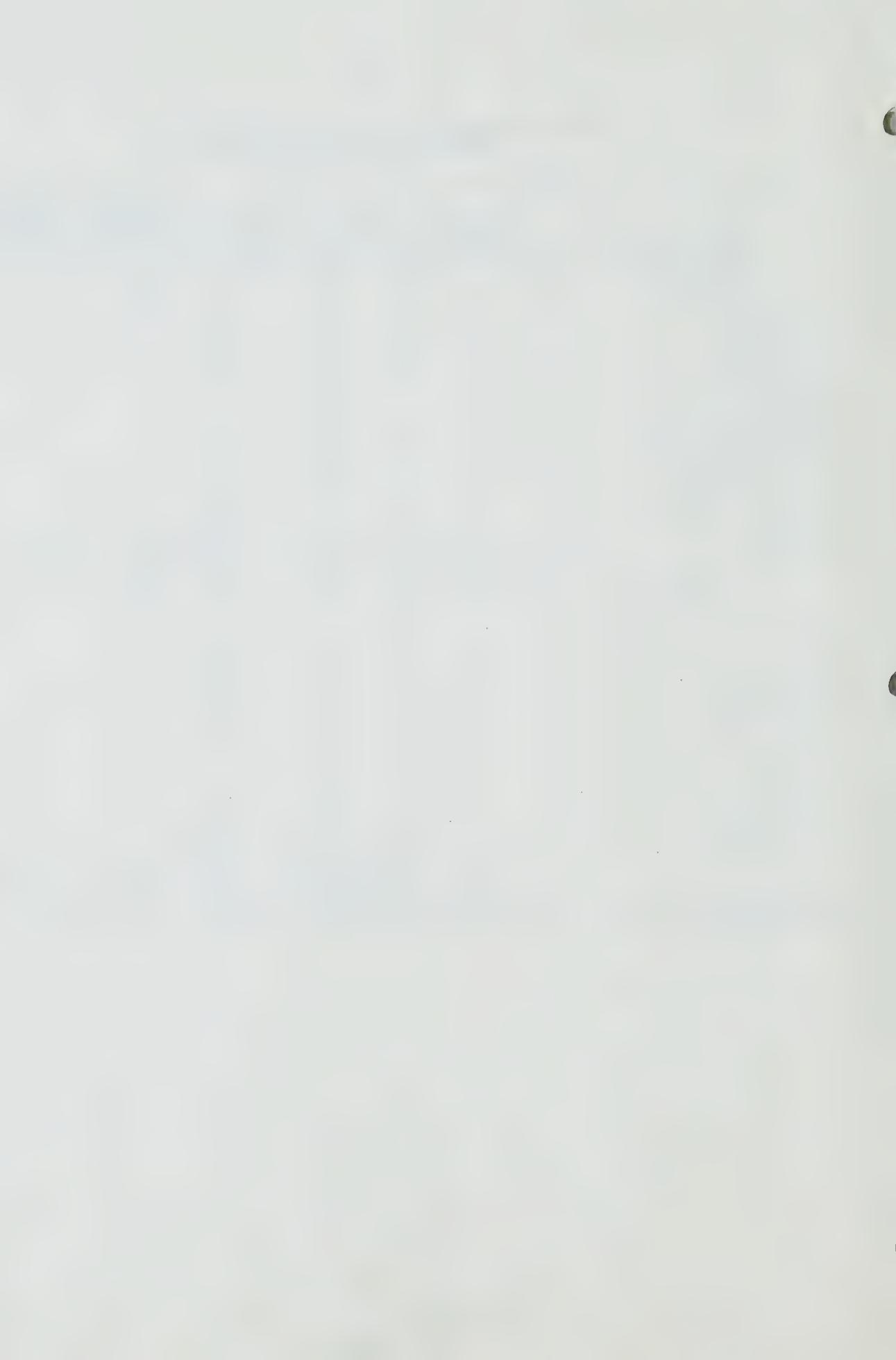


Table 8

Work Stoppages in 1991 in Plants Operated  
During Stoppage, by Industry Group

Industry Group	Number of Stoppages	Workers Involved	Duration of Stoppage		
			Average Days	Minimum Days	Maximum Days
<b>Manufacturing</b>					
Food and beverage . . . . .	1	4	5.0	-	5
Rubber products . . . . .	1	29	39.0	-	39
Leather . . . . .	2	97	40.5	31	50
Wood products . . . . .	1	53	4.0	-	4
Primary metals . . . . .	1	98	75.0	-	75
Fabricated metals . . . . .	5	283	20.2	1	37
Machinery . . . . .	4	423	53.8	49	59
Transportation equipment . . . . .	2	308	28.5	15	42
Non-metallic minerals . . . . .	1	33	7.0	-	7
Chemicals . . . . .	1	17	7.0	-	7
<b>Total . . . . .</b>	<b>19</b>	<b>1,345</b>	<b>31.1</b>	<b>1</b>	<b>75</b>
<b>Non-manufacturing</b>					
Logging . . . . .	1	160	143.0	-	143
Transportation . . . . .	2	85	28.5	8	49
Utilities . . . . .	4	49	28.0	8	65
Wholesale trade . . . . .	1	815	18.0	-	18
Retail trade . . . . .	3	61	38.0	2	85
Finance . . . . .	1	9	21.0	-	21
Education services . . . . .	11	4,828	33.5	5	69
Health services . . . . .	2	32	81.0	-	81
Food services . . . . .	2	14	36.5	8	65
Other services . . . . .	2	34	8.0	-	8
Local government . . . . .	8	402	21.6	3	47
<b>Total . . . . .</b>	<b>37</b>	<b>6,489</b>	<b>34.0</b>	<b>2</b>	<b>143</b>
<b>All stoppages . . . . .</b>	<b>56</b>	<b>7,834</b>	<b>33.0</b>	<b>1</b>	<b>143</b>

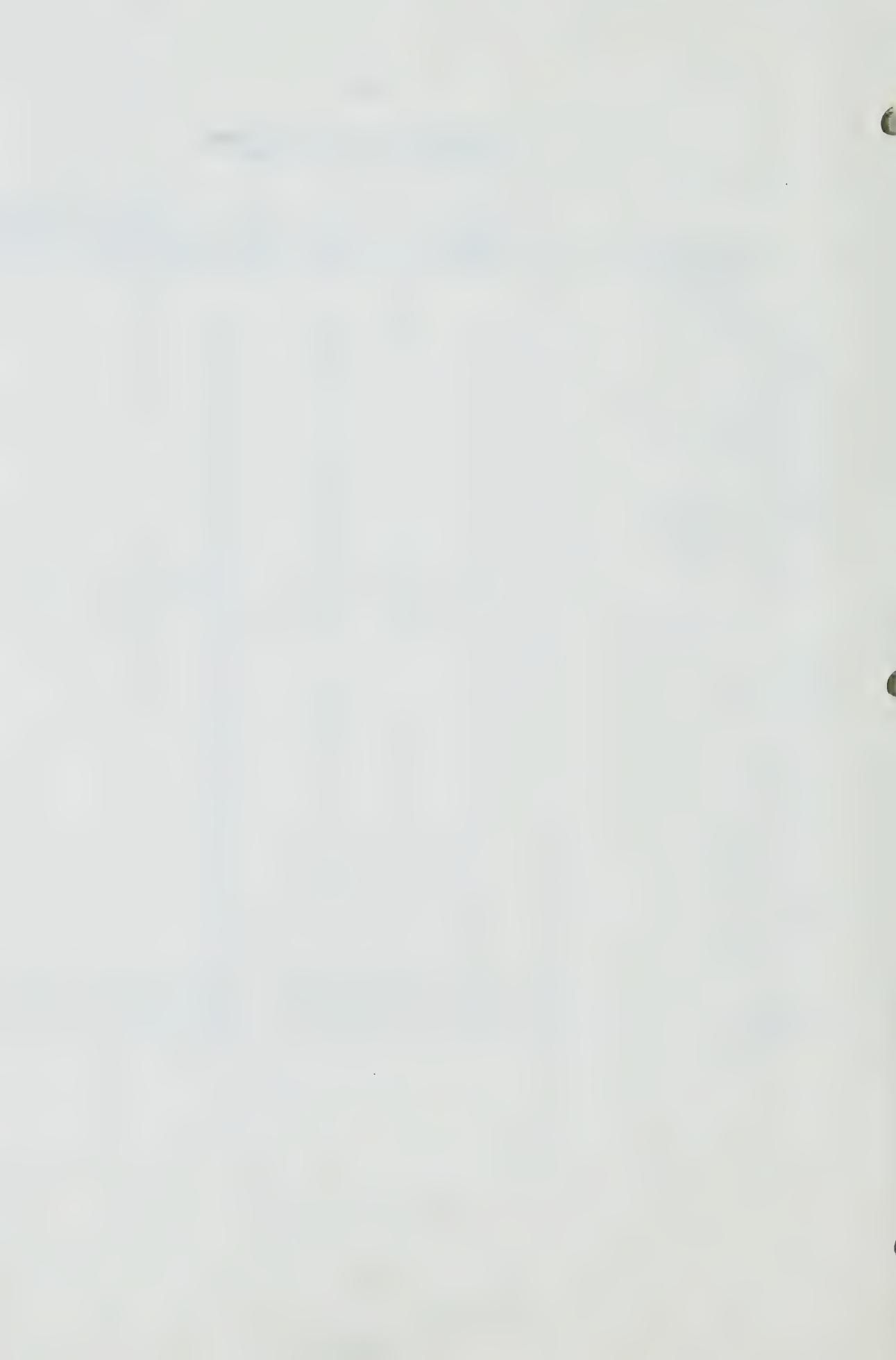


Table 9

Work Stoppages in 1991, by Operating Status of Plant and Duration

Operating Status and Duration	Number of Stoppages	Workers Involved	Duration of Stoppage		
			Average Days	Minimum Days	Maximum Days
<b>Plant not operated during stoppage</b>					
Under 7 days . . . . .	11	8,830	3.6	1	6
7 - 13 days . . . . .	7	1,665	9.4	7	12
14 - 20 days . . . . .	5	783	16.0	15	17
21 - 27 days . . . . .	1	35	27.0	-	27
28 - 34 days . . . . .	-	-	-	-	-
35 - 41 days . . . . .	1	320	35.0	-	35
42 - 48 days . . . . .	5	410	45.6	44	47
49 - 55 days . . . . .	4	235	51.3	49	54
56 - 62 days . . . . .	1	49	62.0	-	49
63 - 69 days . . . . .	2	289	65.0	64	66
70 or more days . . . . .	1	105	79.0	-	79
<b>Total . . . . .</b>	<b>38</b>	<b>12,721</b>	<b>25.1</b>	<b>1</b>	<b>79</b>
<b>Plant operated during stoppage</b>					
Under 7 days . . . . .	10	1,024	3.7	1	6
7 - 13 days . . . . .	10	2,763	9.1	7	13
14 - 20 days . . . . .	6	2,107	15.5	14	18
21 - 27 days . . . . .	4	73	24.8	21	27
28 - 34 days . . . . .	3	172	30.3	29	31
35 - 41 days . . . . .	2	90	38.0	37	39
42 - 48 days . . . . .	5	196	46.2	42	48
49 - 55 days . . . . .	4	369	49.5	49	50
56 - 62 days . . . . .	2	197	58.0	57	59
63 - 69 days . . . . .	4	481	67.0	65	69
70 or more days . . . . .	6	362	91.5	75	143
<b>Total . . . . .</b>	<b>56</b>	<b>7,834</b>	<b>33.0</b>	<b>1</b>	<b>143</b>
<b>All stoppages . . . . .</b>	<b>94</b>	<b>20,555</b>	<b>29.8</b>	<b>1</b>	<b>143</b>

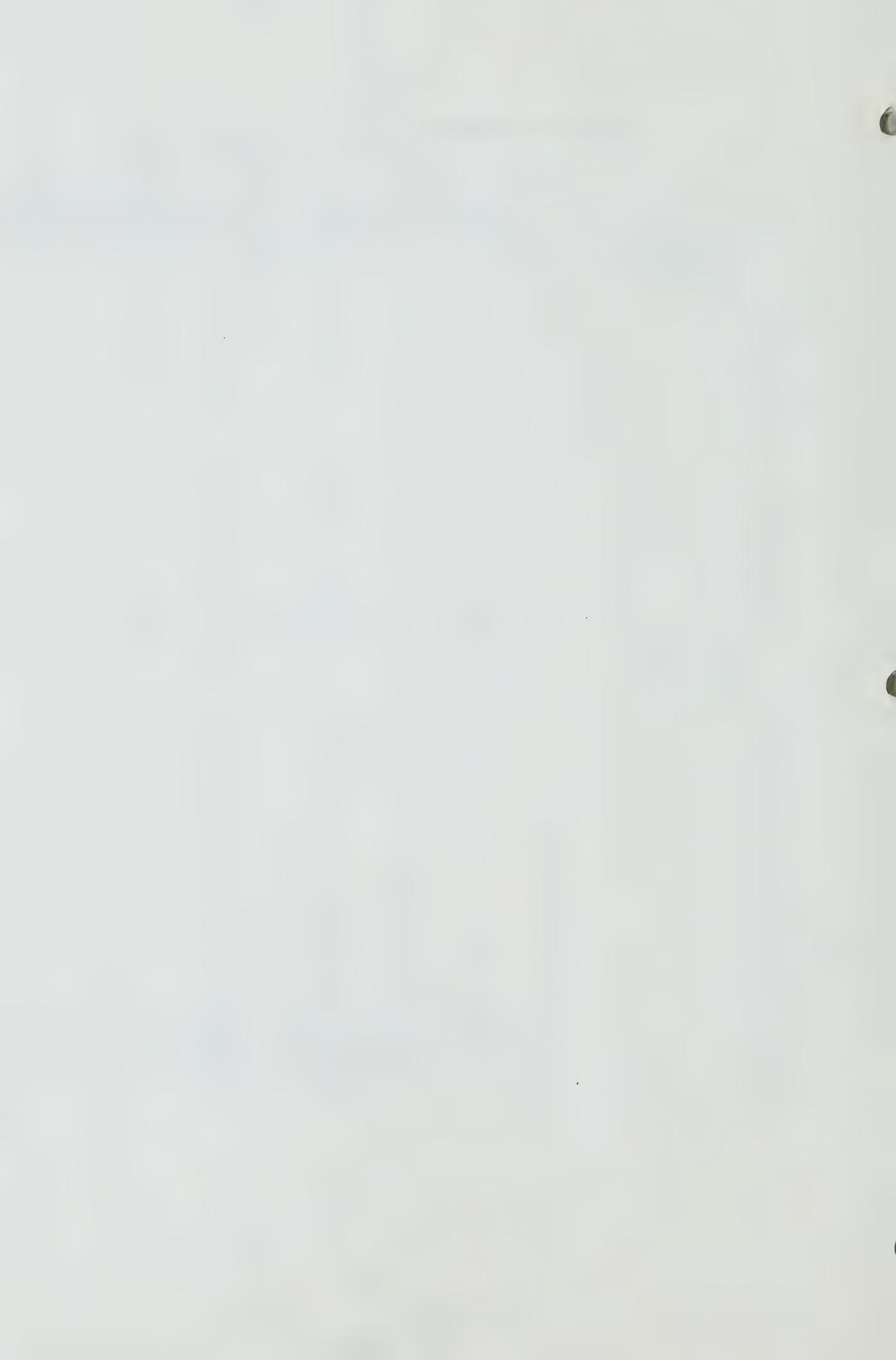


Table 10

Staff on Bargaining Unit Work in Plants Operated During  
Work Stoppages in 1991, by Duration

Staff on Bargaining Unit Work	Number of Stoppages	Workers Involved	Duration of Stoppage		
			Average Days	Minimum Days	Maximum Days
Management only . . . . .	16 <sup>a</sup>	1,490	23.6	1	75
Management and non-union staff . . . . .	11	4,455	33.5	12	81
Management, non-union, and new workers . . . . .	12 <sup>b</sup>	489	53.3	4	143
Management, non-union, and returning strikers . . . . .	7 <sup>c</sup>	159	28.1	8	65
Management, non-union, and contracting-out . . . . .	10 <sup>d</sup>	1,241	26.7	4	65
Total . . . . .	56	7,834	33.0	1	143

<sup>a</sup> In one stoppage, management staff were also brought in from another plant.

<sup>b</sup> In one stoppage, management staff were also brought in from another plant; in two stoppages, non-union workers were also brought in from another plant; and in one stoppage, non-union workers were also brought in from another plant, and new workers were also hired from Quebec (plant involved in stoppage was in Ottawa).

<sup>c</sup> In one stoppage, non-union workers were also brought in from another plant.

<sup>d</sup> In one stoppage, some work was also moved to other plants with management staff, and some work was also contracted out.

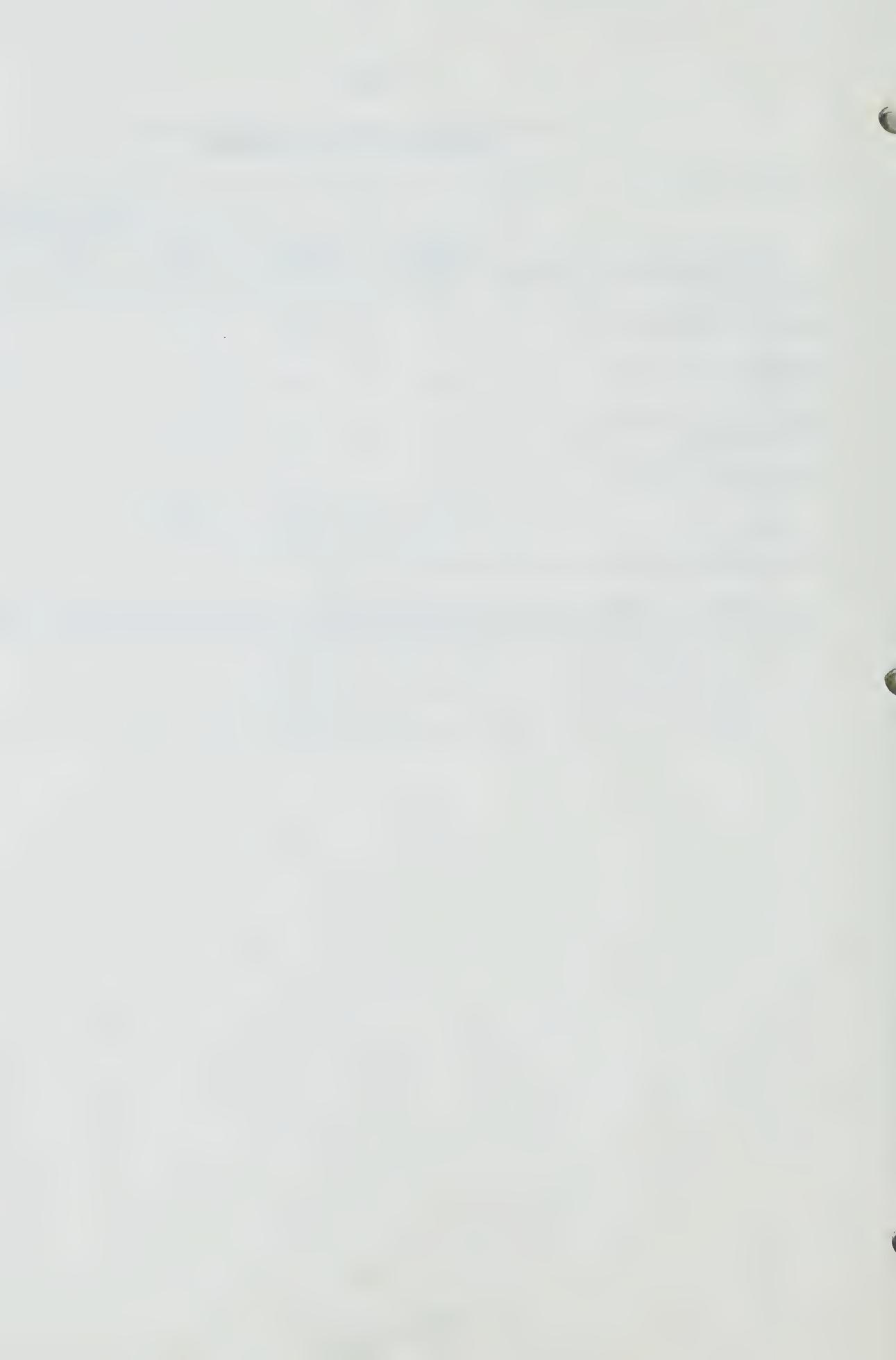


Table 11

Staff on Bargaining Unit Work in Plants Operated During  
Work Stoppages in 1991, by Size of Bargaining Unit

Size of Bargaining Unit				Staff on Bargaining Unit Work					
				Management only			Management and Non-Union		
	Number of stoppages	Workers Involved	Average Duration	Number of Stoppages	Workers Involved	Average Duration	Number of Stoppages	Workers Involved	Average Duration
Under 10 employees . . . . .	11	72	36.5	1	4	5.0	-	1	-
10-24 employees . . . . .	12	207	24.9	4	70	17.0	1	14	12.0
25-49 employees . . . . .	9	280	30.9	3 <sup>a</sup>	103	2.7	2	55	31.5
50-99 employees . . . . .	11	823	35.5	5	401	42.8	2	151	31.5
100-149 employees . . . . .	-	-	-	-	-	-	-	-	-
150-199 employees . . . . .	4	675	52.5	1	185	59.0	-	-	-
200-499 employees . . . . .	5	1,127	43.8	1	218	15.0	4	909	51.0
500 or more employees . . . . .	4	4,650	15.5	1	509	5.0	2	3,326	13.5
Total . . . . .	56	7,834	33.0	16	1,490	23.6	11	4,455	33.5
Staff on Bargaining Unit Work (Cont'd)									
	Management, Non-Union, and New Workers			Management, Non-Union, and Returning Strikers			Management, Non-Union, and Contracting-out		
	Number of Stoppages	Workers Involved	Average Duration	Number of Stoppages	Workers Involved	Average Duration	Number of Stoppages	Workers Involved	Average Duration
Under 10 employees . . . . .	2 <sup>b</sup>	17	51.0	3	23	27.0	5	28	42.8
10-24 employees . . . . .	4 <sup>c</sup>	74	36.5	2 <sup>d</sup>	34	29.0	1	15	15.0
25-49 employees . . . . .	3	97	65.3	1	25	8.0	-	-	-
50-99 employees . . . . .	2	141	26.0	1	77	50.0	1	53	12.0
100-149 employees . . . . .	-	-	-	-	-	-	-	-	-
150-199 employees . . . . .	1	160	143.0	-	-	-	2	330	40.0
200-499 employees . . . . .	-	-	-	-	-	-	-	-	-
500 or more employees . . . . .	-	-	-	-	-	-	1*	815	18.0
Total . . . . .	12	484	53.3	7	159	28.1	10	1,241	26.7

\* In one stoppage, management staff were also brought in from another plant.

<sup>b</sup> In one stoppage, management staff were also brought in from another plant; and in one stoppage, non-union workers were also brought in from another plant.

<sup>c</sup> In one stoppage, non-union workers were also brought in from another plant, and new workers were also hired from Quebec (plant involved in stoppage was in Ottawa).

<sup>d</sup> In one stoppage, non-union workers were also brought in from another plant.

\* In this stoppage, some work was also moved to other plants with management staff and some work was also contracted out.

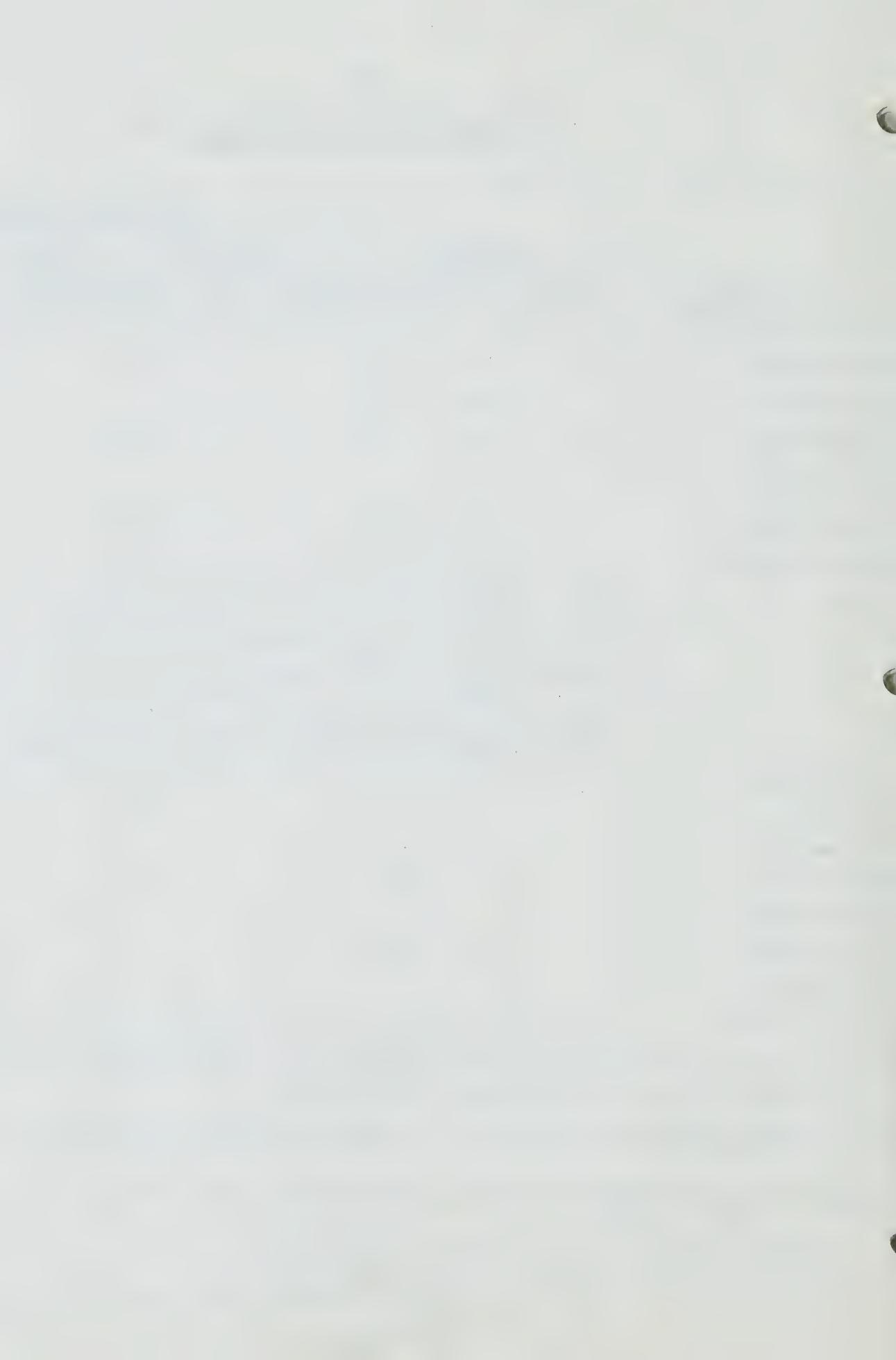


Table 12

**Staff on Bargaining Unit Work in Plants Operated During  
Work Stoppages in 1991, by Industry Sector and Duration**

Industry Sector and Staff on Bargaining Unit Work	Number of Stoppages	Workers Involved	Duration of Stoppage		
			Average Days	Minimum Days	Maximum Days
<b>Manufacturing</b>					
Management only . . . . .	12 <sup>a</sup>	923	30.1	1	75
Management and non-union staff . . . . .	2	240	44.0	39	49
Management, non-union, and new workers . . . . .	3	90	14.0	4	31
Management, non-union, and returning strikers . . . . .	2	92	50.0	-	50
Management, non-union, and contracting-out . . . . .	-	-	-	-	-
<b>Total . . . . .</b>	<b>19</b>	<b>1,345</b>	<b>31.1</b>	<b>1</b>	<b>75</b>
<b>Non-manufacturing</b>					
Management only . . . . .	4	567	4.0	2	6
Management and non-union staff . . . . .	9	4,215	31.2	12	69
Management, non-union, and new workers	9 <sup>b</sup>	399	66.3	21	143
Management, non-union, and returning strikers . . . . .	5 <sup>c</sup>	67	16.2	8	65
Management, non-union, and contracting-out . . . . .	10 <sup>d</sup>	1,241	26.7	4	65
<b>Total . . . . .</b>	<b>37</b>	<b>6,489</b>	<b>34.0</b>	<b>2</b>	<b>143</b>
<b>All stoppages . . . . .</b>	<b>56</b>	<b>7,834</b>	<b>33.0</b>	<b>1</b>	<b>143</b>

<sup>a</sup> In one stoppage, management staff were also brought in from another plant; in two stoppages, non-union workers were also brought in from another plant.

<sup>b</sup> In one stoppage, management staff were also brought in from another plant; in two stoppages, non-union workers were also brought in from another plant; and in one stoppage, non-union workers were also brought in from another plant, and new workers were also hired from Quebec (plant involved in stoppage was in Ottawa).

<sup>c</sup> In one stoppage, non-union workers were also brought in from another plant.

<sup>d</sup> In one stoppage, some work was also moved to other plants with management staff, and some work was also contracted out.

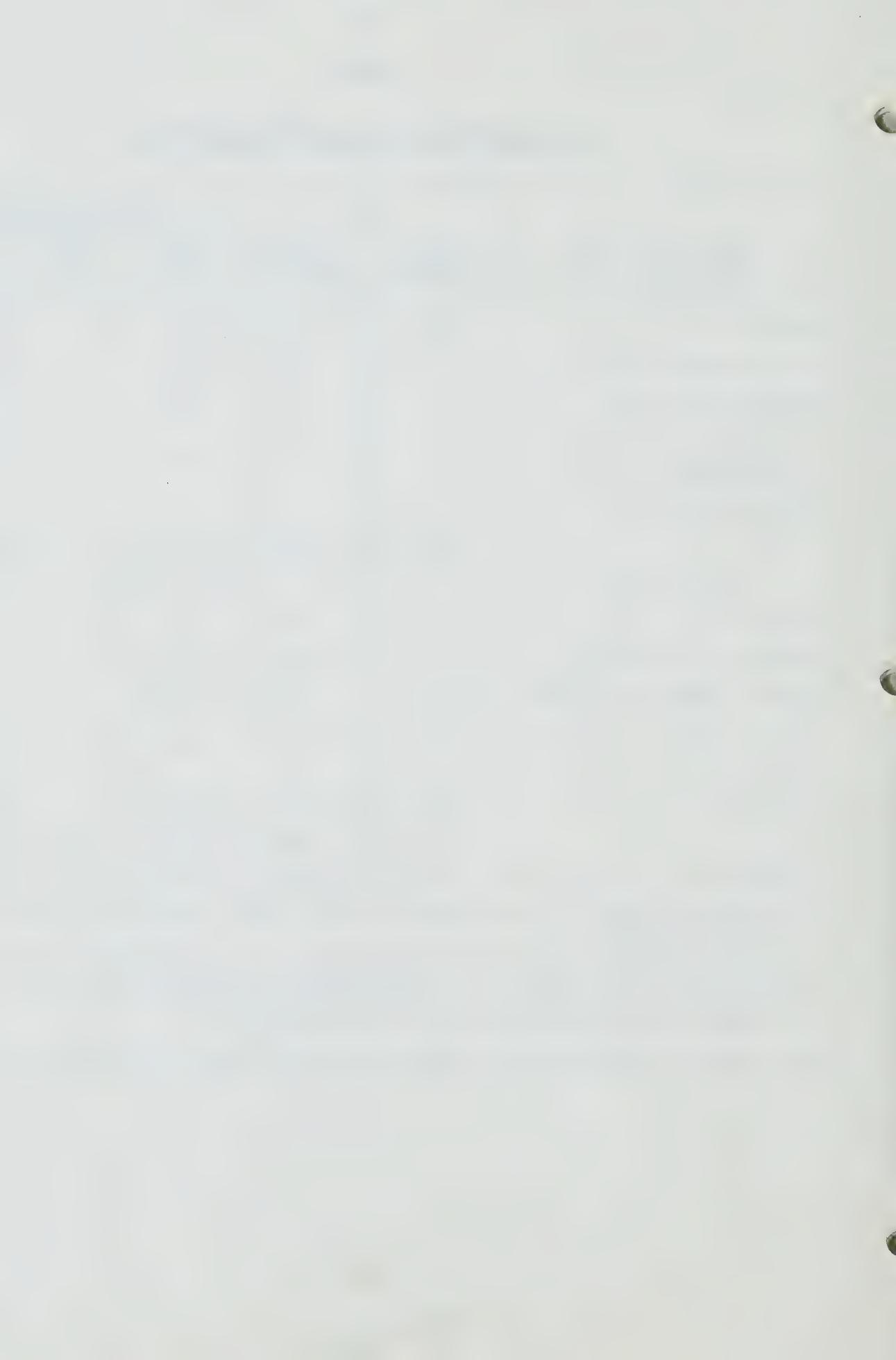


Table 13

Staff on Bargaining Unit Work in Plants Operated During  
Work Stoppages in 1991, by Duration

Duration				Staff on Bargaining Unit Work					
				Management only			Management and Non-Union		
	Number of stoppages	Workers Involved	Average Duration	Number of Stoppages	Workers Involved	Average Duration	Number of Stoppages	Workers Involved	Average Duration
Under 7 days . . . . .	10	1,024	3.7	7	641	3.6	-	-	-
7-13 days . . . . .	10	2,763	9.1	1 <sup>a</sup>	33	7.0	2	2,597	12.5
14-20 days . . . . .	6	2,107	15.5	1	218	15.0	3	1,059	15.0
21-27 days . . . . .	4	73	24.8	-	-	-	1	26	24.0
28-34 days . . . . .	3	172	30.3	2	152	30.0	-	-	-
35-41 days . . . . .	2	90	38.0	1	61	37.0	1	29	39.0
42-48 days . . . . .	5	196	46.2	1	90	42.0	-	-	-
49-55 days . . . . .	4	369	49.5	-	-	-	2	277	49.0
56-62 days . . . . .	2	197	58.0	2	197	58.0	-	-	-
63-69 days . . . . .	4	481	67.0	-	-	-	2	467	69.0
70 or more days . . . . .	6	362	91.3	1	98	75.0	-	-	-
Total . . . . .	56	7,834	33.0	16	1,490	23.6	11	4,455	33.5
Staff on Bargaining Unit Work (Cont'd)									
	Management, Non-Union, and New Workers			Management, Non-Union, and Returning Strikers			Management, Non-Union, and Contracting-out		
	Number of Stoppages	Workers Involved	Average Duration	Number of Stoppages	Workers Involved	Average Duration	Number of Stoppages	Workers Involved	Average Duration
Under 7 days . . . . .	1	53	4.0	-	-	-	2	330	4.0
7-13 days . . . . .	1	17	7.0	4 <sup>d</sup>	59	59	2	57	10.0
14-20 days . . . . .	-	-	-	-	-	-	2 <sup>e</sup>	830	16.5
21-27 days . . . . .	3 <sup>b</sup>	47	25.0	-	-	-	-	-	-
28-34 days . . . . .	1	20	31.0	-	-	-	-	-	-
35-41 days . . . . .	-	-	-	-	-	-	-	-	-
42-48 days . . . . .	1	88	48.0	-	-	-	3	18	47.0
49-55 days . . . . .	-	-	-	2	92	50.0	-	-	-
56-62 days . . . . .	-	-	-	-	-	-	-	-	-
63-69 days . . . . .	-	-	-	1	8	65.0	1	6	65.0
70 or more days . . . . .	5 <sup>c</sup>	264	94.8	-	-	-	-	-	-
Total . . . . .	12	489	53.3	7	159	28.1	10	1,241	26.7

<sup>a</sup> In one stoppage, non-union workers were also brought in from another plant.

<sup>b</sup> In one stoppage, non-union workers were also brought in from another plant, and new workers were also hired from Quebec (plant involved in stoppage was in Ottawa); and in one stoppage, management staff were also brought in from another plant.

<sup>c</sup> In two stoppages, non-union workers were also brought in from another plant.

<sup>d</sup> In one stoppage, non-union workers were also brought in from another plant.

<sup>e</sup> In one stoppage, some work was also moved to other plants with management staff, and some work was contracted out.



Table 14

Incidence of Violence in Work Stoppages in 1991

Intensity	All Stoppages		In Plants Not Operated During Stoppage		In Plants Operated During Stoppage	
	Number of Stoppages	Workers Involved	Number of Stoppages	Workers Involved	Number of Stoppages	Workers Involved
No violence . . . . .	60	5,284	29	3,568	31	1,716
Minor violence . . . . .	29	14,120	9	9,153	20	4,967
Major violence . . . . .	5	1,151	-	-	5	1,151
Total . . . . .	94	20,555	38	12,721	56	7,854

Table 15

Incidence of Violence in Plants Operated During Work Stoppages in 1991, by Staff on Bargaining Unit Work

Staff on Bargaining Unit Work	All Stoppages		No Violence		Minor Violence		Major Violence	
	Number of Stoppages	Workers Involved						
Management only . . . . .	16	1,490	11 <sup>a</sup>	1,032	4	368	1	90
Management and non-union staff .	11	4,455	4	191	6	4,053	1	211
Management, non-union, and new workers . . . . .	12	489	7 <sup>b</sup>	286	4	183	1	20
Management, non-union, and returning strikers . . . . .	7	159	6 <sup>c</sup>	144	1	15	-	-
Management, non-union, and contracting-out . . . . .	10	1,241	3	63	5	348	2 <sup>d</sup>	830
Total . . . . .	56	7,834	31	1,716	20	4,967	5	1,151

<sup>a</sup> In one stoppage, management staff were also brought in from another plant.

<sup>b</sup> In one stoppage, management staff were also brought in from another plant; in two stoppages, non-union workers were also brought in from another plant; and in one stoppage, non-union workers were also brought in from another plant, and new workers were also hired from Quebec (plant involved in stoppage was in Ottawa).

<sup>c</sup> In one stoppage, non-union workers were also brought in from another plant.

<sup>d</sup> In one stoppage, some work was also moved to other plants with management staff, and some work was also contracted out.

1991 *intra-*annual trend of mortality by sex and age

January-June 1991		July-December 1991		January-June 1992	
	Age-specific proportion		Age-specific proportion		Age-specific proportion
0	0.027	0	0.027	0.0	0.027
1-4	0.019	0	0.019	0.0	0.019
5-9	0	0	0.012	0	0.012
10-14	0.051	0	0.051	0	0.051
15-19	0.042	0	0.042	0	0.042
20-24	0.042	0	0.042	0	0.042
25-29	0.042	0	0.042	0	0.042
30-34	0.042	0	0.042	0	0.042
35-39	0.042	0	0.042	0	0.042
40-44	0.042	0	0.042	0	0.042
45-49	0.042	0	0.042	0	0.042
50-54	0.042	0	0.042	0	0.042
55-59	0.042	0	0.042	0	0.042
60-64	0.042	0	0.042	0	0.042
65-69	0.042	0	0.042	0	0.042
70-74	0.042	0	0.042	0	0.042
75-79	0.042	0	0.042	0	0.042
80-84	0.042	0	0.042	0	0.042
85+	0.042	0	0.042	0	0.042

## Results

From information on collected mortality by December 1991, the following results of 1991 are reported:

Age group	January-June 1991		July-December 1991		January-June 1992		Rate of population growth
	Age-specific proportion	Age-specific proportion	Age-specific proportion	Age-specific proportion	Age-specific proportion	Age-specific proportion	
0	0.027	0	0.027	0.0	0.027	0.0	-0.001% (0.000)
1-4	0.019	0	0.019	0.0	0.019	0.0	-0.001% (0.000)
5-9	0	0	0.012	0	0.012	0.0	-0.001% (0.000)
10-14	0.051	0	0.051	0	0.051	0.0	-0.001% (0.000)
15-19	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
20-24	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
25-29	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
30-34	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
35-39	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
40-44	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
45-49	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
50-54	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
55-59	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
60-64	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
65-69	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
70-74	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
75-79	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
80-84	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)
85+	0.042	0	0.042	0	0.042	0.0	-0.001% (0.000)

Information on the sharing data from 1991, from which the mortality rate of each sex and age group was calculated, shows that the mortality rate of each sex and age group was relatively stable. Thus, with this information, it is possible to calculate the mortality rate for 1992. In 1991, the mortality rate for each sex and age group was calculated with the following method. First, the mortality rate for each sex and age group was calculated with the following formula:

$$\text{Mortality rate} = \frac{\text{Number of deaths}}{\text{Number of persons at risk}} \times 1000$$

Second, the mortality rate for each sex and age group was calculated with the following formula:

$$\text{Mortality rate} = \frac{\text{Number of deaths}}{\text{Number of persons at risk}} \times 1000$$

Third, the mortality rate for each sex and age group was calculated with the following formula:

$$\text{Mortality rate} = \frac{\text{Number of deaths}}{\text{Number of persons at risk}} \times 1000$$

Fourth, the mortality rate for each sex and age group was calculated with the following formula:

$$\text{Mortality rate} = \frac{\text{Number of deaths}}{\text{Number of persons at risk}} \times 1000$$

Fifth, the mortality rate for each sex and age group was calculated with the following formula:

$$\text{Mortality rate} = \frac{\text{Number of deaths}}{\text{Number of persons at risk}} \times 1000$$

KF 3431 H38 1992 OWTL

Replacement of striking workers during  
work stoppages in 1991

DATE	ISSUED TO

KF 3431 H38 1992 OWTL

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